TOSHIBA

FILE NO. 033-9902

SERVICE MANUAL

COLOUR TELEVISION

C7SS Chassis

2896DD, 7096DD

– SUMMARY –

This supplement covers the added chassis replacement parts list and circuit of schematic diagram and others for above models.
Use this service manual together with the original service manual 2896DD (File No. 030-9926).

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CIRCUIT DIAGRAM

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL.

SET-UP ADJUSTMENT

■ The following adjustments should be made when a complete realignment is required or a new picture tube is installed. Perform the adjustments in order as follows :

1. Color Purity
2. Convergence
3. White Balance

Note: The PURITY/CONVERGENCE MAGNET assembly and rubber wedges need mechanical positioning. Refer to figure 1.
Mounting position of the purity magnet assembly should fit to same position as old one because slightly difference to the position depend on a kind of tube.

* There are no adjustment of purity and convergence in some picture tube (Unified with purity magnet)

COLOR PURITY ADJUSTMENT

NOTE : Before attempting any purity adjustments, the receiver should be operated for at least fifteen minutes.

1. Demagnetize the picture tube and cabinet using a degaussing coil.
2. Set the brightness and contrast to maximum.
3. Use a green raster from among the built-in test signals.
4. Loosen the clamp screw holding the yoke and slide the yoke backward or forward to provide vertical green belt (zone) in the picture screen.
5. Remove the Rubber Wedges.
6. Rotate and spread the tabs of the purity magnet (See figure 2.) around the neck of the picture tube until the green belt is in the center of the screen. At the same time, enter the raster vertically.
7. Slowly move the yoke forward or backward until a uniform green screen is obtained. Tighten the clamp screw of the yoke temporarily.
8. Check the purity of the red and blue raster.

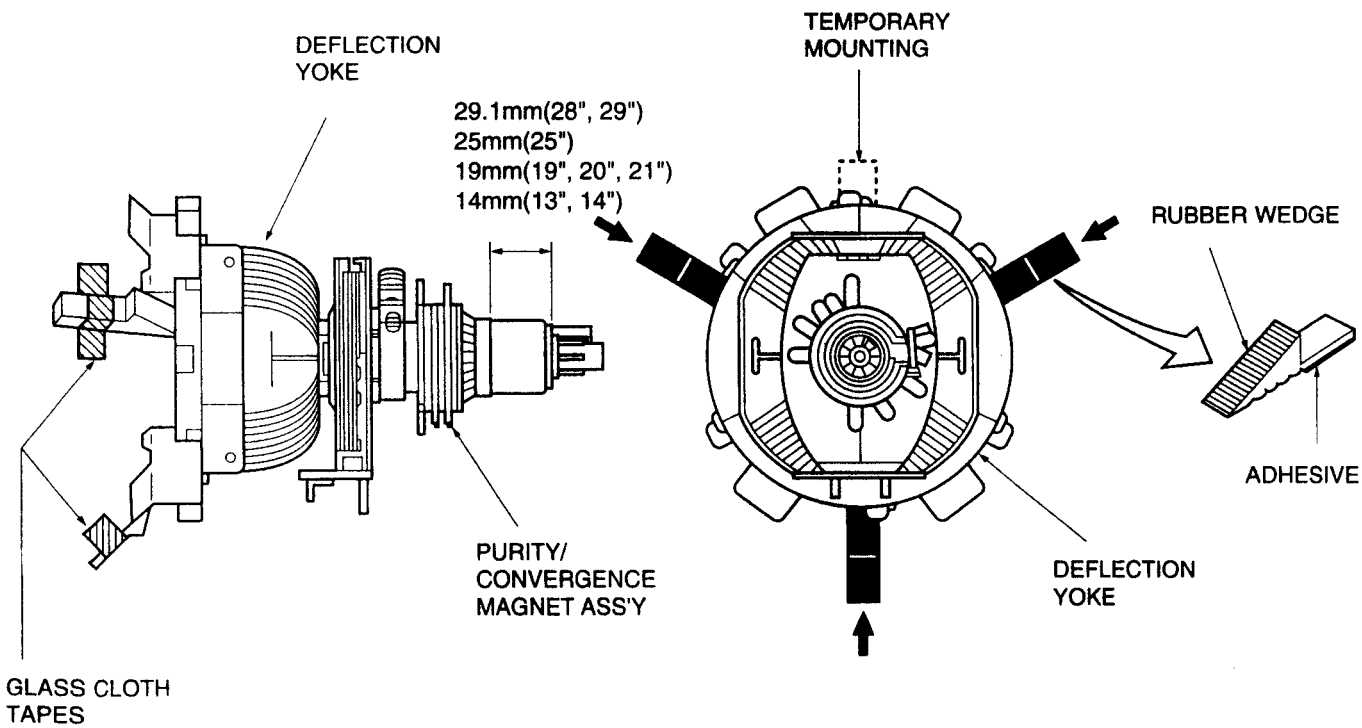


Figure 1.

CHAPTER 1 GENERAL ADJUSTMENTS

SAFETY INSTRUCTIONS

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" INSTRUCTIONS BELOW.

X-RAY RADIATION PRECAUTION

1. Excessive high voltage can produce potentially hazardous X-RAY RADIATION. To avoid such hazards, the high voltage must not be above the specified limit. The nominal value of the high voltage of this receiver is Ⓐ kV at zero beam current (minimum brightness) under a ⓒV AC power source. The high voltage must not, under any circumstances, exceed Ⓑ kV.

Each time a receiver requires servicing, the high voltage should be checked following the HIGH VOLTAGE CHECK procedure in this manual. It is recommended that the reading of the high voltage be recorded as a part of the service record. It is important to use an accurate and reliable high voltage meter.

2. The only source of X-RAY RADIATION in this TV receiver is the picture tube. For continued X-RAY RADIATION protection, the replacement tube must be exactly the same type tube as specified in the parts list.
3. Some part in this receiver have special safety-related characteristics for X-RAY RADIATION protection. For continued safety, parts replacement should be undertaken only after referring to the PRODUCT SAFETY NOTICE below.

SAFETY PRECAUTION

WARNING : Service should not be attempted by anyone unfamiliar with the necessary precautions on this receiver. The following are the necessary precautions to be observed before servicing this chassis.

1. An isolation transformer should be connected in the power line between the receiver and the AC line before any service is performed on the receiver.
2. Always discharge the picture tube anode to the CRT conductive coating before handling the picture tube. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled. Use shatter proof goggles and keep picture tube away from the unprotected body while handling.
3. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as; nonmetallic control knobs, insulating covers, shields, isolation resistor-capacitor network etc.

PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the international hazard symbols on the schematic diagram and the parts list.
Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-ray radiation or other hazards.

CONVERGENCE ADJUSTMENTS

NOTE: Before attempting any convergence adjustments, the receiver should be operated for at least fifteen minutes.

■ CENTER CONVERGENCE ADJUSTMENT

1. Use the cross-dot pattern from among the built-in test signals.
2. Set the brightness and contrast for well defined pattern.
3. Adjust two tabs of the 4-Pole Magnets to change the angle between them (See figure 2.) and superimpose red and blue vertical lines in the center area of the picture screen.
4. Turn the both tabs at the same time keeping the angle constant to superimpose red and blue horizontal lines at the center of the screen.
5. Adjust two tabs of 6-Pole Magnets to superimpose red/blue line and green one. Adjusting the angle affects the vertical lines and rotating both magnets affects the horizontal lines.
6. Repeat adjustments 3, 4, 5 keeping in mind red, green and blue movement, because 4-Pole Magnets and 6-Pole Magnets have mutual interaction and make dot movement complex.

■ CIRCUMFERENCE CONVERGENCE ADJUSTMENT

1. Loosen the clamping screw of deflection yoke slightly to allow the yoke to tilt.
2. Temporarily put a wedge as shown in figure 1. (Do not remove cover paper on adhesive part of the wedge.)
3. Tilt front of the deflection yoke up or down to obtain better convergence in circumference. (See figure 3.) Push the mounted wedge into the space between picture tube and the yoke to fix the yoke temporarily.
4. Put other wedge into bottom space and remove the cover paper to stick.
5. Tilt front of the yoke right or left to obtain better convergence in circumference. (See figure 3.)
6. Keep the yoke position and put another wedge in either upper space. Remove cover paper and stick the wedge on picture tube to fix the yoke.
7. Detach the temporarily mounted wedge and put it in another upper space. Stick it on picture tube to fix the yoke.
8. After fixing three wedges, recheck overall convergence. Tighten the screw firmly to fix the yoke and check the yoke is firm.
9. Stick three adhesive tapes on wedges as shown in figure 1.

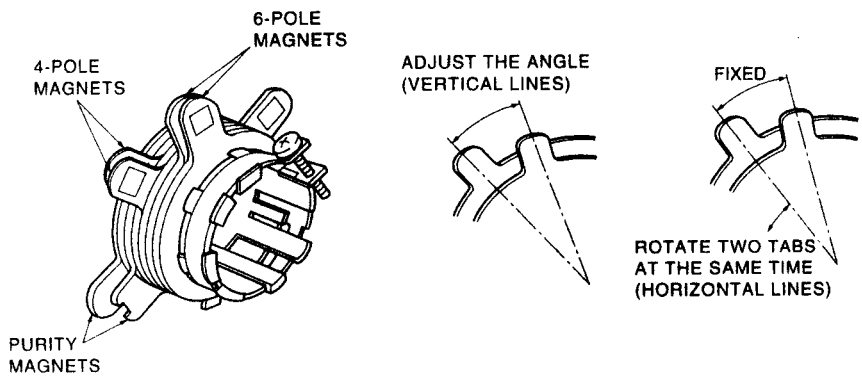
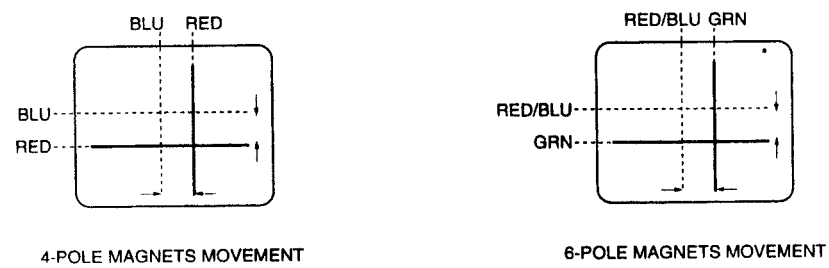


Figure 2.



Center Convergence by Convergence Magnets

Circumference Convergence by DEF Yoke

Figure 3. Dot Movement Pattern

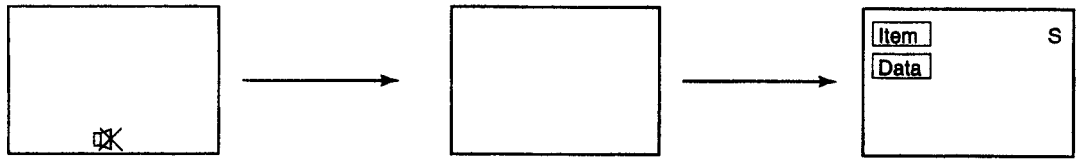
SERVICE MODE

1. ENTERING TO SERVICE MODE

1) Press 🔇 button once on Remote Control.

2) Press 🔇 button again to keep pressing.

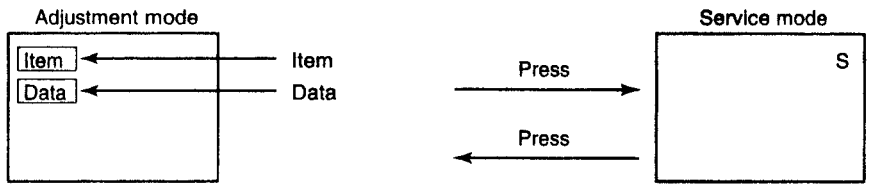
3) Keep pressing the 🔇 button, press MENU button on TV set.



(Service mode display)

2. DISPLAYING THE ADJUSTMENT MENU

1) Press MENU button on TV.



3. KEY FUNCTION IN THE SERVICE MODE

The following key entry during display of adjustment menu provides special functions.

A single horizontal line ON/OFF:	- / - - button (on Remote) or -⊖ button (on TV)
Test signal selection :	-⊖ button (on Remote)
Selection of the adjustment items :	CHANNEL ▲/▼ (on TV & Remote)
Change of the data value :	VOLUME ◿ +/– (on TV & Remote)
Adjustment menu mode ON/OFF :	MENU button on TV
Initialization of the memory (QA02) :	CALL + CHANNEL button on TV (▲)
Reset the count of operating protect circuit to "00":	CALL + CHANNEL button on TV (▼)
"RCUT" selection :	1 button
"GCUT" selection :	2 button
"BCUT" selection :	3 button
"CNTX" (or "SCNT") selection :	4 button
"COLC" selection :	5 button– – – – Color thickness correction
"TNTC" selection :	6 button note: Displayed differently as shown below, depending on the setting of the receiving color system.
Test audio signal ON/OFF (1kHz) :	8 button
Self diagnostic display ON/OFF :	9 button
	COLP (PAL)
	COLC (NTSC)
	COLS (SECAM)

CAUTION : Never try to perform initialization unless you have changed the memory IC.

4. SELECTING THE ADJUSTING ITEMS

1) Every pressing of CHANNEL ▲ button in the service mode changes the adjustment items in the order of table-2. (▼ button for reverse order)

5. ADJUSTING THE DATA

1) Pressing of VOLUME +/– button will change the value of data in the range from 00H to FFH. The variable range depends on the adjusting item.

6. EXIT FROM SERVICE MODE

1) Pressing POWER button to turn off the TV once.

■ INITIALIZATION OF MEMORY DATA OF QA02

After replacing QA02, the following initialization is required.

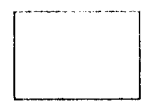
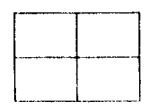
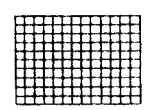
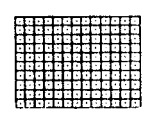
1. Enter the service mode, then select any register item.
2. Press and hold the CALL button on the Remote, then press the CHANNEL ▲ button on the TV. The initialization of QA02 has been complated.
3. Check the picture carefully. If necessary, adjust any adjustment item above. Perform "Auto search Memory" on the owner's manual.

CAUTION: Never attempt to initialize the data unless QA02 has been replaced.

7. TEST SIGNAL SELECTION

Every pressing of -€) button on the Remote Control changes the built-in test patterns on screen as described below in SERVICE MODE.

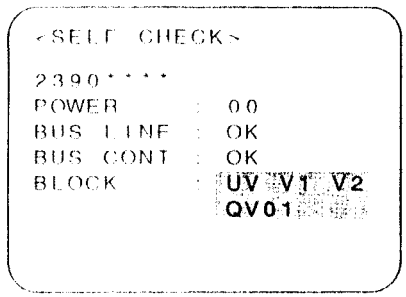
Signal off ——► NTSC signals (14 patterns)
↑ PAL signals (14 patterns) ◄——┘

Signals	Picture
• Red raster • Green raster • Blue raster • All Black • All White	
• Black & White	
• Black cross-bar • White cross-bar • Black cross-bar on green raster	
• Black cross-hatch • White cross-hatch	
• Black cross-dot • White cross-dot	
• H signal (white) • H signal (black)	

* The signals marked with are not usable to display in the Test signal for some model.

SELF DIAGNOSTIC FUNCTION

1) Press "9" button on Remote Control during display of adjustment menu in the service mode.
   The diagnosis will begin to check if interface among IC's are executed properly.
2) During diagnosis, the following displays are shown.



(1) Part number of microcomputer (QA01)
(2) Operation number of protecting circuit ----"00" is normal.
When indication is other than "00", overcurrent apts to flow, and circuit parts may possibly be damaged.
(3) BUS LINE CHECK ----"OK" is normal.
"SCL(SCL1)-GND" ..... SCL-GND short circuit
"SDA(SDA1)-GND" ..... SDA-GND short circuit
"SCL(SCL1)-SDA (SDA1)" ... SCL-SDA short circuit
(4) BUS CONT ----"OK" is normal.
When indication shows "Q OOO NG", the device with the number may possibly be damaged.
(5) BLOCK
UV : TV reception mode
V1 : VIDEO 1 input mode (←①)
V2 : VIDEO 2 input mode (←②)

Indicated color of mode now selected : Green and Red
Indicated color of other modes : White

Green : Normal
Red : The microcomputer operates to provide judgement of no video signal. The red color is still indicated though the signal is input, failure may exist in input signal line including QV01.
QV01 : In case of indication green ---Normal
In case of indication red with input signal----
Failure may exist in output line including QV01.

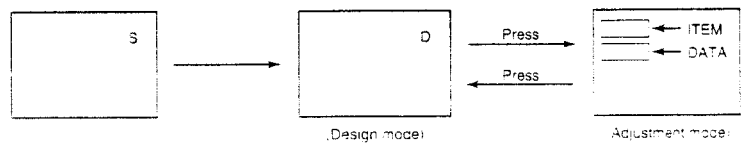
NOTE: Component which controls character display on screen is ICF01 (TELETEXT IC). If this display function fails to operate due to damage in ICF01, self diagnosis procedure is as follows.
(1) In case that power indicator is blinking with interval of 0.5 seconds, it means protecting circuit (Current limiter) is operating, and circuit component may possibly be damaged. Check related components.
(2) In case that power indicator is blinking with interval of 1 second, protecting circuit does not operate, but a part of Bus line does not operate normally. Check Bus line.

* The items marked with are not usable to display in the SELF DIAGNOSTIC FUCTION for some model.

DESIGN MODE

1. ENTERING TO DESIGN MODE

1) Select the Service mode. 2) While pressing (or CALL) button on Remote and press MENU button on TV. 3) Press MENU button on TV.



When QA02 is initialized, items "OPT0" and "OPT1" of DESIGN MODE are set to the data of the representative model of this chassis family.
Therefore, because ON-SCREEN specification remains in the state of the representative model. This model is required to reset the data of items "OPT0" and "OPT1".

2. SELECTING THE ADJUSTING ITEMS

Every pressing of CHANNEL ▼ button in the design mode changes the adjustment items in the order of table-3.

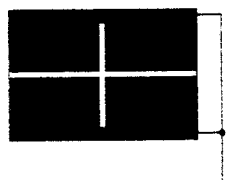
[illegible] (Design mode)
[illegible] DATA on page 16)

3. ADJUSTING THE DATA

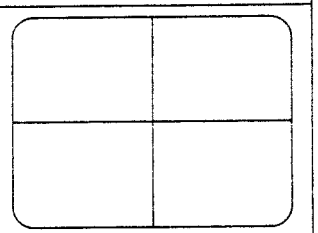
Pressing of VOLUME ▲ or ▼ (/) button will change the value of data.

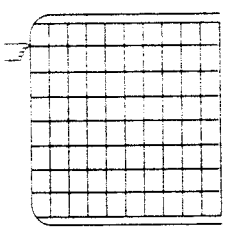
ELECTRICAL ADJUSTMENTS

ITEM	ADJUSTMENT PROCEDURE
FOCUS VR ADJ.	1. Enter the service mode, then select any register item. 2. Press the TV/VIDEO button on the Remote until the black cross-bar pattern appears on the screen. 3. Adjust the FOCUS control (on T461) for well defined scanning lines on the picture screen.
SUB-BRIGHTNESS (BRTC) Note: Constrict the picture height until the vertical retrace line appears adjusting the item HIT (HEIGHT).	1. Set CONTRAST to minimum, and BRIGHTNESS to center by adjusting user controls. 2. Set the TV in service mode to get white cross-bar of inside pattern. 3. Select BRTC (brightness correction), and adjust the ◿ – + button to reduce the value so that white portion of inside pattern slightly light. 4. Adjust ◿ – + button to increase the data value of BRTC, and set it just before the difference between the belt of vertical retrace and the border of black portion of inside pattern is visible. After that, return vertical height and contrast.
HORIZONTAL POSITION ADJUSTMENT (HPOS) VERTICAL POSITION ADJUSTMENT (VPOS)	1. Set the TV in service mode, and get black or white cross-bar signal with VIDEO button on remote hand unit. 2. Select either HPOS (Horizontal picture phase) or VPOS (Vertical picture phase) with CHANNEL ▲, ▼ buttons, and adjust horizontal or vertical picture position in the center of screen with VOLUME ◿ – /+ buttons.
VERTICAL AMPLITUDE ADJUSTMENT (HIT)	1. Set the TV in service mode, and get black or white cross-hatch signal with VIDEO button on remote hand unit. 2. Select HIT (Vertical amplitude) with CHANNEL ▲, ▼ buttons, and adjust vertical amplitude with VOLUME ◿ – /+ buttons so that vertical amplitude lacks a little. 3. Adjust vertical amplitude with VOLUME ◿ – /+ buttons so that the first bar on cross-hatch signal touches edge of screen.

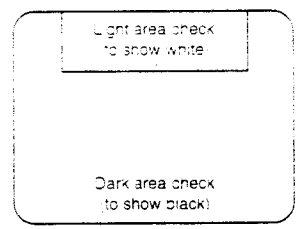


Belt of vertical retrace





ITEM	ADJUSTMENT PROCEDURE
WHITE BALANCE ADJUSTMENT ● CUTOFF ADJUSTMENT (RCUT) (GCUT) (BCUT) ● DRIVE ADJUSTMENT (GDRV) (BDRV)	1. Set Contrast to 40, and brightness to +20 by picture control. 2. Set the TV in service mode, and get the inside W/B adjusting signal with VIDEO button. 3. Select RCUT, GCUT and BCUT with CHANNEL ▲, ▼ buttons, to set individual values to 32, and to set GDRV and BDRV to 20 with VOLUME ◿ – /+ buttons. 4. Press [-/--] button on the remote control and rotate Screen VR to get one slight horizontal line on screen. Note: Every pressing of [-/--] button provides Horizontal line picture and Normal picture alternately. 5. Press [-/--] button to release horizontal line picture, and select the two other colors which did not light in the above step with CHANNEL ▲ ▼ buttons. Then tap VOLUME ◿ – /+ buttons so that three colors slightly light in the same level. ※ To correct white balance in light area, select GDRV and BDRV with CHANNEL ▲, ▼ buttons to adjust. ※ To correct white balance in dark area, perform fine adjustment of RCUT, GCUT and BCUT.



***C7SS Series* (Reference Factory Adjustments)**

Item. [SCNT]
Name. SUB-CONTRAST
SETTING. DYNAMIC MODE
Input signal. SUB-BRIGHT SIGNAL
Measurement place. Q501 #55PIN (TP501)
Adjustment method.
Adjust the amplitude from pedestal-level to a white peak.
Making standard 2.3±0.2Vop
Item. [BRTC]
Name. SUB-BRIGHT CENTER
SETTING. DYNAMIC MODE
Input signal. SUB-BRIGHT SIGNAL
Measurement place. On picture
Adjustment method. It is black step of the ("sub-bright") signal and adjust the number.
Making standard 4±1.5 bar
Item. [COLP]
Name. SUB-COLOR CENTER (PAL)
SETTING. DYNAMIC MODE
Input signal. SUB-BRIGHT SIGNAL (PAL)
Measurement place. Q501 #55PIN (TP501)
Adjustment method. Adjust the amplitude of B-Y.
Making standard 1.40±0.2 Vop
Item. [RCUT], [GCUT], [BCUT], [GDRV], [BDRV], [SCREEN VR]
Name. CUT OFF/DRIVE ADJUST
SETTING. [RCUT], [GCUT], [BCUT], [GDRV], [BDRV] each data set = 40h Set to White line mode0
Input signal. White signal
Measurement place. On picture.
Adjustment method.
Raise screen VR gradually and stop in the place where the line of either of R or G or B shines slightly. Decide the position of screen VR there.
Raise the color data other than the line which shines by first gradually shine point.
Stop in the place which shines in most white. Make clear white line mode.
Adjust it repeatedly for both the shade part and discernment to become a correct numerical value by using proofread CA-100.
Making standard 103cd/m² 8750K –0.002uv 17cd/m² 8750K –0.002uv

Item. [BELL]
Name. BELL FILTER
SETTING. NONE
Input signal. SECAM COLOR BAR.
Measurement place. QQ01 #21 (TPM01)
Adjustment method. Adjust with the synchroscope as the display crimp is flat.
Making standard 100±10%
Item. [SRY]
Name. SECAM R-Y BLACK LEVEL.
SETTING. DYNAMIC MODE
Input signal. SECAM COLOR BAR.
Measurement place. Q501 #55 (TP501)
Adjustment method. Adjust [SRY] the level of the monochrome signal part must be a match to the level of horizontal blanking signal.
Making standard 0±40mV
Item. [SBY]
Name. SECAM B-Y BLACK LEVEL.
SETTING. DYNAMIC MODE
Input signal. SECAM COLOR BAR.
Measurement place. Q501 #55 (TP501)
Adjustment method. Adjust [SBY] the level of the monochrome signal part must be a mutch to the level of horizontal blanking signal.
Making standard 0±40mV
Item. [COLS]
Name. SUB-COLOR CENTER (SECAM).
SETTING. DYNAMIC MODE
Input signal. SECAM COLOR BAR.
Measurement place. Q501 #55 (TP501)
Adjustment method. Adjust the amplitude of R-Y. (Mute the picture in adjustment)
Making standard 1.90±0.2Vop (Pedestal to peak)
Item. [VERT POSITION]
SETTING. CONTRAST=MAX. BRIGHT=CENTER COLOR=CENTER
Input signal. WG Philips Pattern (Do not use French SECAM).
Measurement place. On Screen
Adjustment method. a:Adjust the height so as to appear the flag of both upper and lower side. b:Adjust the picture to the center of the screen by [VPOS].

Item. [BELL]
Name. BELL FILTER
SETTING. NONE
Input signal. SECAM COLOR BAR.
Measurement place. QQ01 #21 (TPM01)
Adjustment method. Adjust with the synchroscope as the display crimp is flat.
Making standard 100±10%
Item. [SRY]
Name. SECAM R-Y BLACK LEVEL.
SETTING. DYNAMIC MODE
Input signal. SECAM COLOR BAR.
Measurement place. Q501 #55 (TP501)
Adjustment method. Adjust [SRY] the level of the monochrome signal part must be a match to the level of horizontal blanking signal.
Making standard 0±40mV
Item. [SBY]
Name. SECAM B-Y BLACK LEVEL.
SETTING. DYNAMIC MODE
Input signal. SECAM COLOR BAR.
Measurement place. Q501 #55 (TP501)
Adjustment method. Adjust [SBY] the level of the monochrome signal part must be a mutch to the level of horizontal blanking signal.
Making standard 0±40mV
Item. [COLS]
Name. SUB-COLOR CENTER (SECAM).
SETTING. DYNAMIC MODE
Input signal. SECAM COLOR BAR.
Measurement place. Q501 #55 (TP501)
Adjustment method. Adjust the amplitude of R-Y. (Mute the picture in adjustment)
Making standard 1.90±0.2Vop (Pedestal to peak)
Item. [VERT POSITION]
SETTING. CONTRAST=MAX. BRIGHT=CENTER COLOR=CENTER
Input signal. WG Philips Pattern (Do not use French SECAM).
Measurement place. On Screen
Adjustment method. a:Adjust the height so as to appear the flag of both upper and lower side. b:Adjust the picture to the center of the screen by [VPOS].

CIRCUIT CHECK

HIGH VOLTAGE CHECK

CAUTION: There is no HIGH VOLTAGE ADJUSTMENT on this chassis. Checking should be done following the steps below.

1. Connect an accurate high voltage meter to the second anode of the picture tube.
2. Turn on the receiver. Set the BRIGHTNESS and CONTRAST controls to minimum (zero beam current).
3. High voltage must be measured below Ⓑ kV.

4. Vary the BRIGHTNESS control to both extremes to be sure the high voltage does not exceed the limit under any conditions.

CHAPTER 2 SPECIFIC INFORMATIONS

SETTING & ADJUSTING DATA

[SAFETY INSTRUCTIONS]

		2896DD	7096DD
HIGH VOLTAGE AT ZERO BEAM:	Ⓐ	29.5 kV	29.5 kV
MAX HIGH VOLTAGE:	Ⓑ	32.0 kV	32.0 kV
AV VOLTAGE:	Ⓒ	220 ~ 240 V	

Table-1

[SERVICE MODE]

ADJUSTING ITEMS AND DATAS IN THE SERVICE MODE:

Item	Adjustments	Reference data
RCUT	R CUTOFF (B/W)	40H
GCUT	G CUTOFF (B/W)	40H
BCUT	B CUTOFF (B/W)	40H
GDRV	G DRIVE	40H
BDRV	B DRIVE	40H
CNTX	SUB CONTRAST MAX (4:3 MODE)	7FH
BRTC	SUB BRIGHT CEN	80H
COLC	SUB COLOR CEN NTSC	00H
TNTC	SUB TINT CEN	48H
COLP	SUB COLOR CEN PAL	1FH
COLS	SUB COLOR CEN SECAM	E7H
SCOL	SUB COLOR	04H
SCNT	SUB CONTRAST	09H
VOLS	VOL SCART	00H
FVOL	FM VOL PRE SCALE	00H
NVOL	NICAM VOL PRE SCALE	00H
NICL	NICAM THRESHOLD LEVEL	00H
NICH	NICAM THRESHOLD LEVEL	00H
IDL	IGR THRESHOLD LEVEL	00H
IDH	IGR THRESHOLD LEVEL	00H

Item	Adjustments	Reference data
XVOL	EXT PRE. VOLUME	11H
EMX	NICAM ON LEVEL	FCH
EMN	NICAM OFF LEVEL	64H
HPOS	50Hz H-POSITION	05H
VPOS	V-POSITION	0BH
HIT	HEIGHT	58H
VLIN	V-LINEARITY	16H
VSC	V-S CORRECTION	19H
VPS	V-SHIFT	0BH
VCP	V-COMPENSATION	09H
WID	PICTURE WIDTH	2BH
PARA	E-W PARABOLA	29H
CNR	E-W CORNER	04H
TRAP	TRAPEZIUM	27H
HCP	H-COMPENSATION	08H
VFC	V-F CORRECTION	0FH
BELL	SECAM BELL FILTER	7EH
SRY	SECAM R-Y	08H
SBY	SECAM B-Y	08H

Table-2

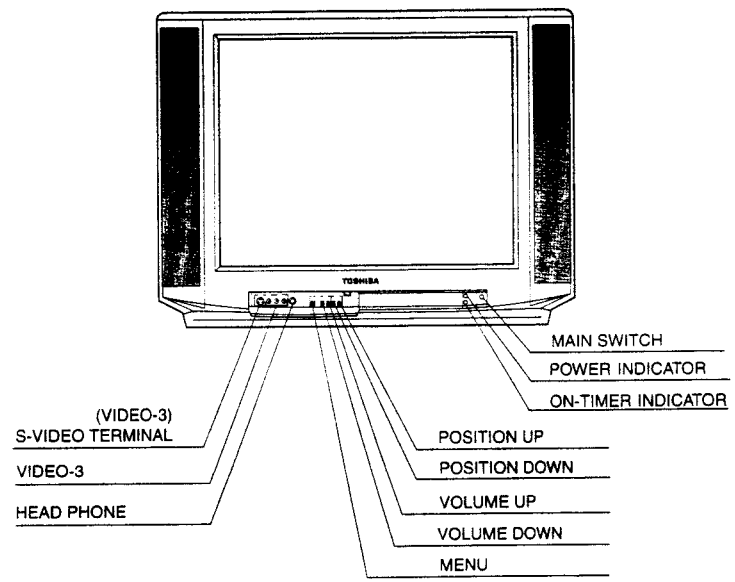
[DESIGN MODE]

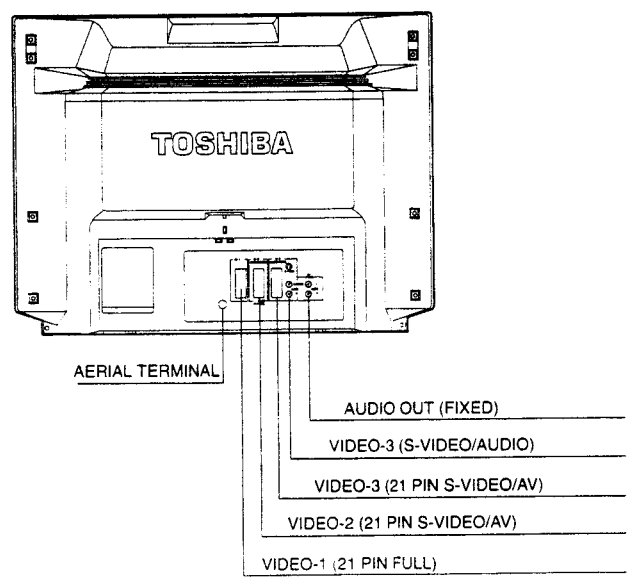
ADJUSTING ITEMS AND DATAS IN THE DESIGN MODE:

Item	Name of adjustment	Data			Remarks
		Preset Data	2896DD	7096DD	
	*There are no adjustment in the DESIGN MODE.				

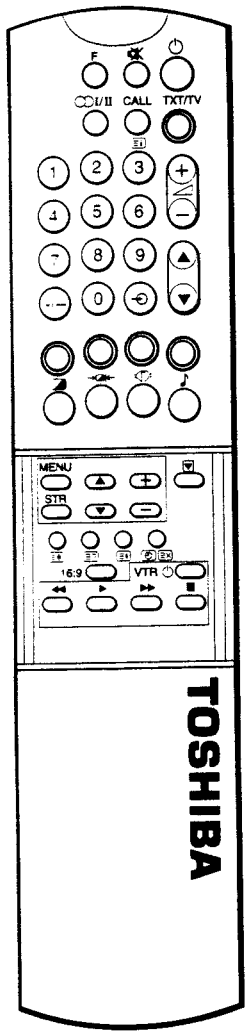
Table-3

LOCATION OF CONTROLS (TV SET)





LOCATION OF CONTROLS (REMOTE CONTROL)

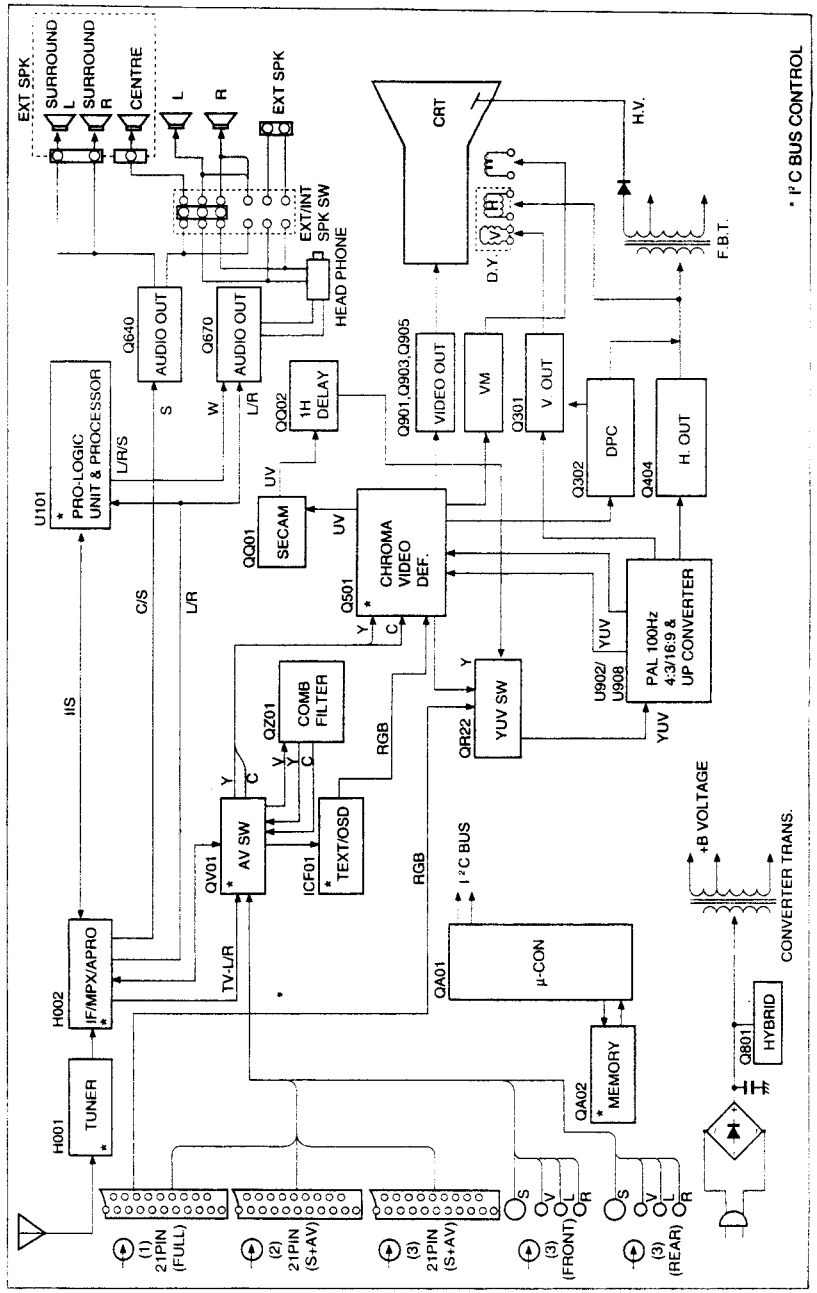


KEY ASSIGNMENT

- ⏻ ..... ON/STAND-BY
- 🔇 ..... Sound mute
- F ..... (Quick/advanced operation)
- CALL (On-screen call)/▤ (index, initial) ..... TELETEXT MODE
- ◪ ..... PICTURE MENU
- ♪ ..... SOUND MENU
- ◌◌ I/II ..... <TV MODE> ..... STEREO BILINGUAL
- 1~9, 0 ..... TEN KEY
- -/- - ..... 1 or 2 place
- ⊖ ..... VIDEO INPUT (EXTERNAL INPUT SOURCE SW.)
- ◿ ..... VOLUME
- \+ ..... LEVEL PLUS (VOLUME, MENU)
- – ..... LEVEL MINUS (VOLUME, MENU)
- ▲ ..... UP (POSI., CH., TEXT PAGE)
- ▼ ..... DOWN (POSI., CH., TEXT PAGE)
- TELE-TEXT
  - TXT/TV ... TEXT, MIX, TV MODE SW.
  - ▤ ..... HOLD
  - ▤ ..... <TEXT MODE> ..... REVEAL / CONCEAL
  - ▤ ..... <TEXT MODE> ..... F-T-B (FULL, TOP, BOTTOM)
  - ▤/▤ ..... TIME DISPLAY (TV MODE) TEXT CLEAR (TEXT MODE)
  - FLOF COLOUR KEY (4 key used) Red/Green/Yellow/Blue
- 🔊 ..... Super woofer
- ⇥◪⇤ ..... Selectable picture
- MENU ..... TUNING & OTHER MENU
- STR ..... Store
- ⊕ / ⊕ ..... Menu select
- ⊖ / ⊕ ..... Level down/up
- 16:9 ..... PIC SIZE (Picture size select)

VTR control
- ⏻ Power on/standby
- ▶ Play
- ■ Stop
- ◀◀ Rewind
- ▶▶ Fast forward

CIRCUIT BLOCK DIAGRAM



CHASSIS AND CABINET REPLACEMENT PARTS LIST

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

NOTICE:
- *The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.*
- *The PC board assembly with ★ mark is no longer available after the end of the production.*

Models : 2896DD, 7096DD

Capacitors ..... CD : Ceramic Disk PF : Plastic Film EL : Electrolytic
Resistors ..... CF : Carbon Film CC : Carbon Composition MF : Metal Film
OMF : Oxide Metal Film VR : Variable Resistor FR : Fusible Resistor

(All CD and PF capacitors are ±5%, 50V and all resistors, ±5%, 1/6W unless otherwise noted.)

Location No.	Part No.	Description
CAPACITORS		
C102	24763221	EL, 220μF, ±20%, 16V
C103	24232103	CD, 0.01μF, +80%, -20%
C104	24794470	EL, 47μF, ±20%, 16V
C105	24212102	CD, 1000pF, ±10%
C106	24797100	EL, 10μF, ±20%, 50V
C107	24763221	EL, 220μF, ±20%, 16V
C108	24763101	EL, 100μF, ±20%, 16V
C109	24232103	CD, 0.01μF, +80%, -20%
C115	24232103	CD, 0.01μF, +80%, -20%
C116	24763221	EL, 220μF, ±20%, 16V
C183	24797229	EL, 2.2μF, ±20%, 50V
C201	24206100	EL, 10μF, ±20%, 50V
C203	24538104	PF, 0.1μF
C204	24206010	EL, 1μF, ±20%, 50V
C205	24206229	EL, 2.2μF, ±20%, 50V
C206	24797220	EL, 22μF, ±20%, 50V
C207	24436100	CD, 10pF
C208	24436100	CD, 10pF
C209	24436100	CD, 10pF
C211	24353330	CD, 33pF, CH
C212	24794100	EL, 10μF, ±20%, 16V
C214	24591334	PF, 0.33μF
C215	24474101	CD, 100pF, ±10%
C216	24474101	CD, 100pF, ±10%
C218	24473390	CD, 39pF
C303	24214471	CD, 470pF, ±10%, 500V
C304	24693473	PF, 0.047μF, 100V
C305	24617912	EL, 2.2μF, ±10%, 50V
C306	24073059	EL, 3300μF, ±20%, 25V
C307	24793101	EL, 100μF, ±20%, 10V
C308	24668221	EL, 220μF, ±20%, 35V
C309	24668101	EL, 100μF, ±20%, 35V
C310	24796222	EL, 2200μF, ±20%, 35V
C311	24538473	PF, 0.047μF
C312	24591273	PF, 0.027μF
C313	24082058	PF, 0.27μF, 100V
C315	24212102	CD, 1000pF, ±10%
C315	24797229	EL, 2.2μF, ±20%, 50V
C316	24538393	PF, 0.039μF
C318	24666101	EL, 100μF, ±20%, 16V

Location No.	Part No.	Description
C319	24212102	CD, 1000pF, ±10%
C321	24591203	PF, 0.02μF
C323	24538224	PF, 0.22μF
C324	24538683	PF, 0.068μF
C325	24617912	EL, 2.2μF, ±10%, 50V
C327	24617787	EL, 470μF, ±20%, 16V
C328	24232103	CD, 0.01μF, +80%, -20%
C341	24797478	EL, 0.47μF, ±20%, 50V
C366	24693473	PF, 0.047μF, 100V
C370	24794101	EL, 100μF, ±20%, 16V
C371	24794100	EL, 10μF, ±20%, 16V
C401	24538104	PF, 0.1μF
C403	24591333	PF, 0.033μF
C404	24797229	EL, 2.2μF, ±20%, 50V
C410	24092341	CD, 470pF, ±10%, 2kV
C413	24214332	CD, 3300pF, ±10%, 500V
C416	24668101	EL, 100μF, ±20%, 35V
C417	24214391	CD, 390pF, ±10%, 500V
C419	24212102	CD, 1000pF, ±10%
C420	24763101	EL, 100μF, ±20%, 16V
C421	24539104	PF, 0.1μF
C423	24829473	PF, 0.047μF, 400V
C430	24232103	CD, 0.01μF, +80%, -20%
C431	24212103	CD, 0.01μF, ±10%
C431	24794102	EL, 1000μF, ±20%, 16V
C439	24082832	PF, 3600pF, ±3%, 1800V
C440	24082831	PF, 3300pF, ±3%, 1800V
C442	24082642	PF, 0.16μF, 400V
C443	24082644	PF, 0.2μF, 400V
C444	24082827	PF, 2200pF, ±3%, 1800V
C445	24828473	PF, 0.047μF, 200V
C446	24820103	PF, 0.01μF, 630V
C448	24640908	EL, 33μF, ±20%, 160V
C460	24796331	EL, 330μF, ±20%, 35V
C461	24082827	PF, 2200pF, ±3%, 1800V
C462	24796222	EL, 2200μF, ±20%, 35V
C463	24212392	CD, 3900pF, ±10%
C464	24640900	EL, 4.7μF, ±20%, 100V
C466	24095884	PF, 0.013μF, ±3%, 630V
C469	24092337	CD, 220pF, ±10%, 2kV
C470	24794220	EL, 22μF, ±20%, 16V

Location No.	Part No.	Description
C472	24538474	PF, 0.47μF
C473	24669010	EL, 1μF, ±20%, 50V
C475	24095887	PF, 0.01μF, ±3%, 630V
C477	24590563	PF, 0.056μF
C478	24590563	PF, 0.056μF
C479	24214471	CD, 470pF, ±10%, 500V
C481	24538104	PF, 0.1μF
C484	24591152	PF, 1500pF
C491	24082749	PF, 1.5μF, 250V
C492	24082645	PF, 0.47μF, 400V
C494	24082644	PF, 0.2μF, 400V
C495	24092343	CD, 680pF, ±10%, 2kV
C496	24092343	CD, 680pF, ±10%, 2kV
C501	24212101	CD, 100pF, ±10%
C502	24232103	CD, 0.01μF, +80%, -20%
C503	24793471	EL, 470μF, ±20%, 10V
C504	24591222	PF, 2200pF
C505	24353120	CD, 12pF, CH
C507	24353120	CD, 12pF, CH
C508	24206100	EL, 10μF, ±20%, 50V
C509	24763101	EL, 100μF, ±20%, 16V
C510	24763101	EL, 100μF, ±20%, 16V
C511	24232103	CD, 0.01μF, +80%, -20%
C512	24206228	EL, 0.22μF, ±20%, 50V
C513	24092398	CD, 0.1μF, +80%, -20%, 25V
C514	24538104	PF, 0.1μF
C515	24538104	PF, 0.1μF
C516	24212102	CD, 1000pF, ±10%
C517	24353010	CD, 1pF, ±0.25pF, CH
C520	24474102	CD, 1000pF, ±10%
C521	24212102	CD, 1000pF, ±10%
C522	24473470	CD, 47pF
C523	24473470	CD, 47pF
C526	24474101	CD, 100pF, ±10%
C599	24353010	CD, 1pF, ±0.25pF, CH
C613	24794470	EL, 47μF, ±20%, 16V
C652	24668471	EL, 470μF, ±20%, 35V
C661	24538104	PF, 0.1μF
C664	24203100	EL, 10μF, ±20%, 16V
C665	24206229	EL, 2.2μF, ±20%, 50V
C666	24206229	EL, 2.2μF, ±20%, 50V
C667	24232103	CD, 0.01μF, +80%, -20%
C668	24212102	CD, 1000pF, ±10%
C669	24668330	EL, 33μF, ±20%, 35V
C670	24668330	EL, 33μF, ±20%, 35V
C671	24797010	EL, 1μF, ±20%, 50V
C673	24474102	CD, 1000pF, ±10%
C673	24797010	EL, 1μF, ±20%, 50V
C674	24474102	CD, 1000pF, ±10%
C674	24797010	EL, 1μF, ±20%, 50V
C675	24474102	CD, 1000pF, ±10%
C675	24795470	EL, 47μF, ±20%, 25V
C676	24474102	CD, 1000pF, ±10%
C676	24797479	EL, 4.7μF, ±20%, 50V
C677	24591102	PF, 1000pF
C678	24474102	CD, 1000pF, ±10%
C678	24591102	PF, 1000pF
C679	24474102	CD, 1000pF, ±10%
C680	24668102	EL, 1000μF, ±20%, 35V
C681	24474102	CD, 1000pF, ±10%
C681	24668471	EL, 470μF, ±20%, 35V
C682	24474102	CD, 1000pF, ±10%
C682	24668471	EL, 470μF, ±20%, 35V
C684	24591124	PF, 0.12μF

Location No.	Part No.	Description
C685	24591124	PF, 0.12μF
C686	24591124	PF, 0.12μF
C687	24232103	CD, 0.01μF, +80%, -20%
C688	24203220	EL, 22μF, ±20%, 16V
C704	24232103	CD, 0.01μF, +80%, -20%
C705	24797229	EL, 2.2μF, ±20%, 50V
C707	24794470	EL, 47μF, ±20%, 16V
C712	24666470	EL, 47μF, ±20%, 16V
C713	24790100	EL, 10μF, ±20%, 160V
C714	24436101	CD, 100pF
C715	24214472	CD, 470pF, ±10%, 500V
C716	24436101	CD, 100pF
C717	24214472	CD, 470pF, ±10%, 500V
C718	24794470	EL, 47μF, ±20%, 16V
C719	24435151	CD, 150pF, 500V, SL
C720	24790100	EL, 10μF, ±20%, 160V
C721	24794470	EL, 47μF, ±20%, 16V
⚠C801	24082927	PF, 0.22μF, ±20%, AC275V
⚠C802	24082927	PF, 0.22μF, ±20%, AC275V
⚠C805	24092281	CD, 4700pF, ±20%, AC250V
C806	24092281	CD, 4700pF, ±20%, AC250V
C807	24567474	PF, 0.47μF
C808	24667331	EL, 330μF, ±20%, 25V
C809	24214471	CD, 470pF, ±10%, 500V
C810	24086873	EL, 330μF, ±20%, 400V
⚠C813	24092557	CD, 220pF, ±20%, AC250V
⚠C814	24092557	CD, 220pF, ±20%, AC250V
C816	24669221	EL, 220μF, ±20%, 50V
C817	24092341	CD, 470pF, ±10%, 2kV
C818	24095931	PF, 2200pF, 1250V
C819	24676220	EL, 22μF, ±20%, 100V
C820	24092343	CD, 680pF, ±10%, 2kV
C821	24214471	CD, 470pF, ±10%, 500V
C829	24590182	PF, 1800pF
C831	24794470	EL, 47μF, ±20%, 16V
C832	24794470	EL, 47μF, ±20%, 16V
C833	24669100	EL, 10μF, ±20%, 50V
C834	24797100	EL, 10μF, ±20%, 50V
C835	24794470	EL, 47μF, ±20%, 16V
C841	24669100	EL, 10μF, ±20%, 50V
C842	24669100	EL, 10μF, ±20%, 50V
C843	24538104	PF, 0.1μF
C846	24538104	PF, 0.1μF
C884	24086916	EL, 330μF, ±20%, 160V
C885	24214471	CD, 470pF, ±10%, 500V
C887	24214471	CD, 470pF, ±10%, 500V
C889	24668222	EL, 2200μF, ±20%, 35V
C892	24667222	EL, 2200μF, ±20%, 25V
C893	24092337	CD, 220pF, ±10%, 2kV
C895	24669470	EL, 47μF, ±20%, 50V
C896	24214471	CD, 470pF, ±10%, 500V
C897	24666332	EL, 3300μF, ±20%, 16V
C898	24590153	PF, 0.015μF
C899	24214471	CD, 470pF, ±10%, 500V
C902	24092353	CD, 4700pF, ±10%, 2kV
C904	24436471	CD, 470pF
C905	24436471	CD, 470pF
C907	24436471	CD, 470pF
C909	24679220	EL, 22μF, ±20%, 250V
C910	24797478	EL, 0.47μF, ±20%, 50V
C911	24203100	EL, 10μF, ±20%, 16V
C912	24794102	EL, 1000μF, ±20%, 16V
C913	24763102	EL, 1000μF, ±20%, 16V
C914	24212103	CD, 0.01μF, ±10%

SPECIFIC INFORMATIONS

Location No.	Part No.	Description
C915	24092398	CD, 0.1μF, +80%, -20%, 25V
C920	24591104	PF, 0.1μF
C921	24591104	PF, 0.1μF
C930	24214101	CD, 100pF, ±10%, 500V
C931	24214101	CD, 100pF, ±10%, 500V
C4031	24591562	PF, 5600pF
C4041	24797229	EL, 2.2μF, ±20%, 50V
C4301	24797010	EL, 1μF, ±20%, 50V
C4303	24591433	PF, 0.043μF
C4304	24591153	PF, 0.015μF
C4305	24794101	EL, 100μF, ±20%, 16V
C4306	24232103	CD, 0.01μF, +80%, -20%
C4307	24232103	CD, 0.01μF, +80%, -20%
C4311	24794471	EL, 470μF, ±20%, 16V
C4401	24232103	CD, 0.01μF, +80%, -20%
C4402	24232103	CD, 0.01μF, +80%, -20%
C4403	24501561	PF, 560pF
C4404	24501132	PF, 0.0013μF
C4405	24797479	EL, 4.7μF, ±20%, 50V
C4406	24232103	CD, 0.01μF, +80%, -20%
C4408	24766229	EL, 2.2μF, ±20%, 50V
C4412	24501132	PF, 0.0013μF
C4413	24501102	PF, 0.001μF
C4414	24232103	CD, 0.01μF, +80%, -20%
C4415	24567474	PF, 0.47μF
C4416	24501161	PF, 160pF
C4417	24590332	PF, 3300pF
C4421	24353330	CD, 33pF, CH
C4466	24820103	PF, 0.01μF, 630V
CA13	24474101	CD, 100pF, ±10%
CA30	24474101	CD, 100pF, ±10%
CA33	24232103	CD, 0.01μF, +80%, -20%
CA37	24474101	CD, 100pF, ±10%
CA38	24474101	CD, 100pF, ±10%
CA42	24794100	EL, 10μF, ±20%, 16V
CA44	24232103	CD, 0.01μF, +80%, -20%
CA68	24794100	EL, 10μF, ±20%, 16V
CA69	24232103	CD, 0.01μF, +80%, -20%
CB01	24794470	EL, 47μF, ±20%, 16V
CC09	24212471	CD, 470pF, ±10%
CC10	24474101	CD, 100pF, ±10%
CC20	24212102	CD, 1000pF, ±10%
CC21	24473470	CD, 47pF
CC22	24473470	CD, 47pF
CC30	24475222	CD, 0.022μF, ±30%, 16V
CC31	24232103	CD, 0.01μF, +80%, -20%
CC32	24232103	CD, 0.01μF, +80%, -20%
CF03	24567104	PF, 0.1μF
CF04	24766101	EL, 100μF, ±20%, 50V
CF05	24766101	EL, 100μF, ±20%, 50V
CF06	24353220	CD, 22pF, CH
CF07	24353220	CD, 22pF, CH
CF08	24567104	PF, 0.1μF
CF09	24567104	PF, 0.1μF
CF10	24206100	EL, 10μF, ±20%, 50V
CF11	24567104	PF, 0.1μF
CF12	24232103	CD, 0.01μF, +80%, -20%
CF14	24232103	CD, 0.01μF, +80%, -20%
CF16	24567224	PF, 0.22μF
CG01	24591124	PF, 0.12μF
CG02	24567104	PF, 0.1μF
CG03	24590823	PF, 0.082μF
CG04	24669010	EL, 1μF, ±20%, 50V
CG05	24666220	EL, 22μF, ±20%, 16V

Location No.	Part No.	Description
CG07	24669010	EL, 1μF, ±20%, 50V
CG08	24669010	EL, 1μF, ±20%, 50V
CG09	24669010	EL, 1μF, ±20%, 50V
CG12	24591273	PF, 0.027μF
CG13	24232103	CD, 0.01μF, +80%, -20%
CG14	24666101	EL, 100μF, ±20%, 16V
CG15	24591822	PF, 8200pF
CG16	24669010	EL, 1μF, ±20%, 50V
CG17	24591273	PF, 0.027μF
CG18	24591822	PF, 8200pF
CG24	24669100	EL, 10μF, ±20%, 50V
CG25	24212102	CD, 1000pF, ±10%
CG26	24669100	EL, 10μF, ±20%, 50V
CG27	24669229	EL, 2.2μF, ±20%, 50V
CG28	24669229	EL, 2.2μF, ±20%, 50V
CG29	24232103	CD, 0.01μF, +80%, -20%
CG30	24232103	CD, 0.01μF, +80%, -20%
CQ19	24590103	PF, 0.01μF
CQ20	24567104	PF, 0.1μF
CQ21	24794470	EL, 47μF, ±20%, 16V
CQ22	24232103	CD, 0.01μF, +80%, -20%
CQ23	24567104	PF, 0.1μF
CQ24	24567104	PF, 0.1μF
CQ25	24797100	EL, 10μF, ±20%, 50V
CQ26	24567104	PF, 0.1μF
CQ27	24567104	PF, 0.1μF
CQ28	24797478	EL, 0.47μF, ±20%, 50V
CQ29	24794101	EL, 100μF, ±20%, 16V
CQ30	24232103	CD, 0.01μF, +80%, -20%
CQ31	24797478	EL, 0.47μF, ±20%, 50V
CQ32	24590103	PF, 0.01μF
CQ33	24567104	PF, 0.1μF
CQ34	24567104	PF, 0.1μF
CQ35	24206478	EL, 0.47μF, ±20%, 50V
CQ36	24206478	EL, 0.47μF, ±20%, 50V
CQ37	24797010	EL, 1μF, ±20%, 50V
CQ38	24797010	EL, 1μF, ±20%, 50V
CQ39	24797010	EL, 1μF, ±20%, 50V
CQ45	24212102	CD, 1000pF, ±10%
CQ46	24212102	CD, 1000pF, ±10%
CQ60	24797229	EL, 2.2μF, ±20%, 50V
CR12	24538104	PF, 0.1μF
CR13	24538104	PF, 0.1μF
CR14	24538104	PF, 0.1μF
CR21	24232103	CD, 0.01μF, +80%, -20%
CR22	24203470	EL, 47μF, ±20%, 16V
CR23	24794101	EL, 100μF, ±20%, 16V
CR24	24794101	EL, 100μF, ±20%, 16V
CR25	24794101	EL, 100μF, ±20%, 16V
CR26	24591223	PF, 0.022μF
CR27	24591223	PF, 0.022μF
CR28	24591223	PF, 0.022μF
CR29	24794100	EL, 10μF, ±20%, 16V
CR30	24591223	PF, 0.022μF
CR31	24797229	EL, 2.2μF, ±20%, 50V
CR32	24591223	PF, 0.022μF
CR33	24232103	CD, 0.01μF, +80%, -20%
CR35	24794331	EL, 330μF, ±20%, 16V
CR36	24092398	CD, 0.1μF, +80%, -20%, 25V
CR40	24794470	EL, 47μF, ±20%, 16V
CR41	24232103	CD, 0.01μF, +80%, -20%
CR42	24203101	EL, 100μF, ±20%, 16V
CR43	24794101	EL, 100μF, ±20%, 16V
CR44	24794101	EL, 100μF, ±20%, 16V

Location No.	Part No.	Description
CS01	24085944	EL, 2.2μF, ±20%, 50V, Non-Polar
CS02	24085944	EL, 2.2μF, ±20%, 50V, Non-Polar
CS03	24206229	EL, 2.2μF, ±20%, 50V
CS04	24206229	EL, 2.2μF, ±20%, 50V
CS05	24206229	EL, 2.2μF, ±20%, 50V
CS06	24206229	EL, 2.2μF, ±20%, 50V
CS07	24206229	EL, 2.2μF, ±20%, 50V
CS08	24206229	EL, 2.2μF, ±20%, 50V
CS09	24206010	EL, 1μF, ±20%, 50V
CS12	24474102	CD, 1000pF, ±10%
CS13	24474102	CD, 1000pF, ±10%
CS14	24206100	EL, 10μF, ±20%, 50V
CS15	24206100	EL, 10μF, ±20%, 50V
CS17	24666100	EL, 10μF, ±20%, 16V
CS18	24666100	EL, 10μF, ±20%, 16V
CS19	24206478	EL, 0.47μF, ±20%, 50V
CS22	24666100	EL, 10μF, ±20%, 16V
CS23	24666100	EL, 10μF, ±20%, 16V
CV01	24590103	PF, 0.01μF
CV02	24085970	EL, 10μF, ±20%, 16V, Non-Polar
CV03	24666100	EL, 10μF, ±20%, 16V
CV04	24666100	EL, 10μF, ±20%, 16V
CV05	24232103	CD, 0.01μF, +80%, -20%
CV06	24666100	EL, 10μF, ±20%, 16V
CV07	24232103	CD, 0.01μF, +80%, -20%
CV08	24763102	EL, 1000μF, ±20%, 16V
CV09	24666100	EL, 10μF, ±20%, 16V
CV10	24085970	EL, 10μF, ±20%, 16V, Non-Polar
CV11	24436331	CD, 330pF
CV12	24092398	CD, 0.1μF, +80%, -20%, 25V
CV13	24232103	CD, 0.01μF, +80%, -20%
CV14	24474102	CD, 1000pF, ±10%
CV15	24474102	CD, 1000pF, ±10%
CV16	24474102	CD, 1000pF, ±10%
CV17	24474102	CD, 1000pF, ±10%
CV18	24474102	CD, 1000pF, ±10%
CV19	24474102	CD, 1000pF, ±10%
CV20	24353330	CD, 33pF, CH
CV23	24666101	EL, 100μF, ±20%, 16V
CV24	24232103	CD, 0.01μF, +80%, -20%
CV25	24763471	EL, 470μF, ±20%, 16V
CV34	24474102	CD, 1000pF, ±10%
CV35	24212102	CD, 1000pF, ±10%
CV37	24474102	CD, 1000pF, ±10%
CV39	24666101	EL, 100μF, ±20%, 16V
CV40	24232103	CD, 0.01μF, +80%, -20%
CV46	24212332	CD, 3300pF, ±10%
CV47	24212332	CD, 3300pF, ±10%
CV48	24212102	CD, 1000pF, ±10%
CV65	24203101	EL, 100μF, ±20%, 16V
CV66	24203101	EL, 100μF, ±20%, 16V
CV67	24763471	EL, 470μF, ±20%, 16V
CV68	24763471	EL, 470μF, ±20%, 16V
CV80	24232103	CD, 0.01μF, +80%, -20%
CX102	24085939	EL, 4.7μF, ±20%, 25V, Non-Polar
CX103	24092399	CD, 0.1μF, +80%, -20%, 16V
CX104	24092399	CD, 0.1μF, +80%, -20%, 16V
CX105	24105330	Chip, 33pF
CX106	24105680	Chip, 68pF

Location No.	Part No.	Description
CX107	24105330	Chip, 33pF
CX108	24092399	CD, 0.1μF, +80%, -20%, 16V
CX109	24085945	EL, 2.2μF, ±20%, 50V, Non-Polar
CX110	24665471	EL, 470μF, ±20%, 10V
CX111	24092399	CD, 0.1μF, +80%, -20%, 16V
CX112	24092399	CD, 0.1μF, +80%, -20%, 16V
CX113	24092399	CD, 0.1μF, +80%, -20%, 16V
CX114	24092399	CD, 0.1μF, +80%, -20%, 16V
CX115	24203470	EL, 47μF, ±20%, 16V
CX116	24092399	CD, 0.1μF, +80%, -20%, 16V
CX117	24092399	CD, 0.1μF, +80%, -20%, 16V
CX118	24794101	EL, 100μF, ±20%, 16V
CX119	24092399	CD, 0.1μF, +80%, -20%, 16V
CX120	24105470	Chip, 47pF
CX125	24105101	Chip, 100pF
CX126	24105271	Chip, 270pF
CX127	24092399	CD, 0.1μF, +80%, -20%, 16V
CX128	24085971	EL, 3.3μF, ±20%, 50V, Non-Polar
CX129	24092399	CD, 0.1μF, +80%, -20%, 16V
CX130	24794101	EL, 100μF, ±20%, 16V
CX131	24092399	CD, 0.1μF, +80%, -20%, 16V
CX132	24794101	EL, 100μF, ±20%, 16V
CX133	24092399	CD, 0.1μF, +80%, -20%, 16V
CX134	24092399	CD, 0.1μF, +80%, -20%, 16V
CX136	24092399	CD, 0.1μF, +80%, -20%, 16V
CX137	24665101	EL, 100μF, ±20%, 10V
CX138	24092399	CD, 0.1μF, +80%, -20%, 16V
CX139	24092399	CD, 0.1μF, +80%, -20%, 16V
CX140	24092399	CD, 0.1μF, +80%, -20%, 16V
CX141	24092399	CD, 0.1μF, +80%, -20%, 16V
CX146	24105470	Chip, 47pF
CX147	24105101	Chip, 100pF
CX148	24105271	Chip, 270pF
CX149	24092399	CD, 0.1μF, +80%, -20%, 16V
CX150	24085971	EL, 3.3μF, ±20%, 50V, Non-Polar
CX151	24092399	CD, 0.1μF, +80%, -20%, 16V
CX152	24203470	EL, 47μF, ±20%, 16V
CX153	24092399	CD, 0.1μF, +80%, -20%, 16V
CX154	24794101	EL, 100μF, ±20%, 16V
CX155	24092399	CD, 0.1μF, +80%, -20%, 16V
CX156	24092399	CD, 0.1μF, +80%, -20%, 16V
CX157	24105150	Chip, 15pF
CX158	24105330	Chip, 33pF
CX201	24203470	EL, 47μF, ±20%, 16V
CX202	24092399	CD, 0.1μF, +80%, -20%, 16V
CX203	24092399	CD, 0.1μF, +80%, -20%, 16V
CX204	24203220	EL, 22μF, ±20%, 16V
CX205	24665101	EL, 100μF, ±20%, 10V
CX206	24203101	EL, 100μF, ±20%, 16V
CX207	24665101	EL, 100μF, ±20%, 10V
CX208	24092399	CD, 0.1μF, +80%, -20%, 16V
CX209	24092399	CD, 0.1μF, +80%, -20%, 16V
CX210	24092399	CD, 0.1μF, +80%, -20%, 16V
CX211	24203100	EL, 10μF, ±20%, 16V
CX212	24665101	EL, 100μF, ±20%, 10V
CX220	24092399	CD, 0.1μF, +80%, -20%, 16V
CX221	24092399	CD, 0.1μF, +80%, -20%, 16V
CX222	24092399	CD, 0.1μF, +80%, -20%, 16V
CX223	24092399	CD, 0.1μF, +80%, -20%, 16V
CX224	24092399	CD, 0.1μF, +80%, -20%, 16V
CX226	24092399	CD, 0.1μF, +80%, -20%, 16V

Location No.	Part No.	Description
CX227	24092399	CD, 0.1μF, +80%, -20%, 16V
CX228	24092441	Chip, 1μF, +80%, -20%, 16V
CX229	24092441	Chip, 1μF, +80%, -20%, 16V
CX230	24092399	CD, 0.1μF, +80%, -20%, 16V
CX232	24092399	CD, 0.1μF, +80%, -20%, 16V
CX233	24762102	EL, 1000μF, ±20%, 10V
CX234	24762102	EL, 1000μF, ±20%, 10V
CX242	24105330	Chip, 33pF
CX301	24665101	EL, 100μF, ±20%, 10V
CX302	24092399	CD, 0.1μF, +80%, -20%, 16V
CX303	24665101	EL, 100μF, ±20%, 10V
CX304	24092399	CD, 0.1μF, +80%, -20%, 16V
CX305	24092441	Chip, 1μF, +80%, -20%, 16V
CX306	24105330	Chip, 33pF
CX307	24105330	Chip, 33pF
CX308	24105101	Chip, 100pF
CX309	24105680	Chip, 68pF
CX310	24105101	Chip, 100pF
CX311	24105680	Chip, 68pF
CX312	24105100	Chip, 10pF, ±0.5pF
CX313	24105100	Chip, 10pF, ±0.5pF
CX314	24105100	Chip, 10pF, ±0.5pF
CX400	24108221	Chip, 220pF
CX401	24108330	Chip, 33pF
CX402	24108330	Chip, 33pF
CX403	24108221	Chip, 220pF
CX404	24108221	Chip, 220pF
CX405	24108221	Chip, 220pF
CX406	24108221	Chip, 220pF
CX407	24108331	Chip, 330pF
CX408	24108221	Chip, 220pF
CX409	24105120	Chip, 12pF
CX410	24105220	Chip, 22pF
CX411	24105220	Chip, 22pF
CX412	24105220	Chip, 22pF
CX413	24105220	Chip, 22pF
CX414	24105220	Chip, 22pF
CX415	24108221	Chip, 220pF
CX801	24763471	EL, 470μF, ±20%, 16V
CX802	24092399	CD, 0.1μF, +80%, -20%, 16V
CX803	24665471	EL, 470μF, ±20%, 10V
CX804	24092399	CD, 0.1μF, +80%, -20%, 16V
CX805	24092399	CD, 0.1μF, +80%, -20%, 16V
CX806	24092399	CD, 0.1μF, +80%, -20%, 16V
CZ08	24203100	EL, 10μF, ±20%, 16V
CZ09	24436220	CD, 22pF
CZ10	24473180	CD, 18pF
CZ11	24473100	CD, 10pF
CZ12	24232103	CD, 0.01μF, +80%, -20%
CZ13	24092398	CD, 0.1μF, +80%, -20%, 25V
CZ14	24617816	EL, 10μF, ±20%, 50V
CZ15	24232103	CD, 0.01μF, +80%, -20%
CZ16	24206478	EL, 0.47μF, ±20%, 50V
CZ17	24232103	CD, 0.01μF, +80%, -20%
CZ19	24436181	CD, 180pF
CZ20	24590103	PF, 0.01μF
CZ21	24436390	CD, 39pF
CZ22	24617816	EL, 10μF, ±20%, 50V
CZ23	24092398	CD, 0.1μF, +80%, -20%, 25V
CZ24	24092398	CD, 0.1μF, +80%, -20%, 25V
CZ25	24203101	EL, 100μF, ±20%, 16V
CZ26	24232103	CD, 0.01μF, +80%, -20%
CZ28	24232103	CD, 0.01μF, +80%, -20%
CZ29	24092398	CD, 0.1μF, +80%, -20%, 25V

Location No.	Part No.	Description
CZ30	24617816	EL, 10μF, ±20%, 50V
CZ32	24436120	CD, 12pF
CZ33	24436120	CD, 12pF
CZ34	24473120	CD, 12pF
CZ35	24473120	CD, 12pF
CZ37	24092398	CD, 0.1μF, +80%, -20%, 25V
CZ38	24092398	CD, 0.1μF, +80%, -20%, 25V
CZ45	24436100	CD, 10pF
CZ48	24203470	EL, 47μF, ±20%, 16V
RESISTORS		
R101	24382223	OMF, 22k ohm, 1W
R201	24366681	CF, 680 ohm
R202	24366821	CF, 820 ohm
R203	24366100	CF, 10 ohm
R204	24366104	CF, 100k ohm
R205	24366101	CF, 100 ohm
R206	24366222	CF, 2200 ohm
R207	24366101	CF, 100 ohm
R208	24366101	CF, 100 ohm
R208	24366103	CF, 10k ohm
R209	24366101	CF, 100 ohm
R209	24366103	CF, 10k ohm
R211	24366563	CF, 56k ohm
R215	24366102	CF, 1k ohm
R216	24366103	CF, 10k ohm
R217	24366101	CF, 100 ohm
R217	24366332	CF, 3300 ohm
R218	24366513	CF, 51k ohm
R220	24366102	CF, 1k ohm
R221	24366102	CF, 1k ohm
R223	24366102	CF, 1k ohm
R226	24366101	CF, 100 ohm
R227	24366623	CF, 62k ohm
R229	24366472	CF, 4700 ohm
R232	24366103	CF, 10k ohm
R233	24366104	CF, 100k ohm
R234	24366100	CF, 10 ohm
R235	24366472	CF, 4700 ohm
R236	24366102	CF, 1k ohm
R237	24366103	CF, 10k ohm
R299	24366103	CF, 10k ohm
R303	24321109	MF, 1 ohm, 1/2W
R304	24366153	CF, 15k ohm
R305	24322129	MF, 1.2 ohm, 1W
R306	24366222	CF, 2200 ohm
R307	24366621	CF, 620 ohm
R308	24366472	CF, 4700 ohm
R309	24366333	CF, 33k ohm
R310	24366102	CF, 1k ohm
R312	24366163	CF, 16k ohm
R313	24366303	CF, 30k ohm
R314	24366105	CF, 1M ohm
R315	24366684	CF, 680k ohm
R316	24366154	CF, 150k ohm
R317	24366472	CF, 4700 ohm
R318	24366471	CF, 470 ohm
R319	24366471	CF, 470 ohm
R320	24366101	CF, 100 ohm
R321	24366103	CF, 10k ohm
R322	24366102	CF, 1k ohm
R323	24366103	CF, 10k ohm
R324	24366122	CF, 1200 ohm
R325	24366103	CF, 10k ohm

Location No.	Part No.	Description
R325	24366103	CF, 10k ohm
R327	24339339	MF, 3.3 ohm, 2W
R328	24366102	CF, 1k ohm
R329	24366103	CF, 10k ohm
R330	24366113	CF, 11k ohm
R331	24366104	CF, 100k ohm
R336	24383271	OMF, 270 ohm, 2W
R341	24366822	CF, 8200 ohm
R343	24366183	CF, 18k ohm
R344	24383821	OMF, 820 ohm, 2W
R360	24366103	CF, 10k ohm
R370	24322159	MF, 1.5 ohm, 1W
R371	24366562	CF, 5600 ohm
R372	24366392	CF, 3900 ohm
R373	24366182	CF, 1800 ohm
R374	24366153	CF, 15k ohm
R399	24366684	CF, 680k ohm
R401	24366391	CF, 390 ohm
R402	24366103	CF, 10k ohm
R403	24366242	CF, 2400 ohm
R405	24553682	OMF, 6800 ohm, 1W
R407	24366103	CF, 10k ohm
R411	24366560	CF, 56 ohm
R414	24383220	OMF, 22 ohm, 2W
R415	24553561	OMF, 560 ohm, 1W
R416	24381563	OMF, 56k ohm, 1/2W
R417	24510101	Cement, 100 ohm, 5W
R424	24366152	CF, 1500 ohm
R425	24366182	CF, 1800 ohm
R426	24366751	CF, 750 ohm
R427	24366392	CF, 3900 ohm
R428	24366561	CF, 560 ohm
R429	24552560	OMF, 56 ohm, 1/2W
R441	24383561	OMF, 560 ohm, 2W
R460	24552332	OMF, 3300 ohm, 1/2W
R461	24552152	OMF, 1500 ohm, 1/2W
R463	24323229	MF, 2.2 ohm, 2W
R464	24366273	CF, 27k ohm
R465	24366114	CF, 110k ohm
R466	24366562	CF, 5600 ohm
R469	24531150	FR, 15 ohm, 1/2W
R470	24339568	MF, 0.56 ohm, 2W
R471	24531271	FR, 270 ohm, 1/2W
R473	24366473	CF, 47k ohm
R474	24366473	CF, 47k ohm
R478	24376333	CF, 33k ohm, 1/2W
R479	24531680	FR, 68 ohm, 1/2W
R480	24552222	OMF, 2200 ohm, 1/2W
R481	24366223	CF, 22k ohm
R482	24366103	CF, 10k ohm
R487	24366474	CF, 470k ohm
R488	24366154	CF, 150k ohm
R490	24366101	CF, 100 ohm
R491	24366101	CF, 100 ohm
R492	24366272	CF, 2700 ohm
R499	24366182	CF, 1800 ohm
R501	24366223	CF, 22k ohm
R502	24366101	CF, 100 ohm
R503	24366101	CF, 100 ohm
R505	24366102	CF, 1k ohm
R506	24366103	CF, 10k ohm
R508	24366102	CF, 1k ohm
R509	24366102	CF, 1k ohm
R510	24366102	CF, 1k ohm

Location No.	Part No.	Description
R511	24366101	CF, 100 ohm
R512	24366101	CF, 100 ohm
R513	24366472	CF, 4700 ohm
R514	24366472	CF, 4700 ohm
R518	24366472	CF, 4700 ohm
R519	24366101	CF, 100 ohm
R612	24366103	CF, 10k ohm
R630	24366512	CF, 5100 ohm
R631	24366512	CF, 5100 ohm
R661	24552221	OMF, 220 ohm, 1/2W
R662	24552221	OMF, 220 ohm, 1/2W
R670	24366272	CF, 2700 ohm
R671	24366392	CF, 3900 ohm
R672	24366272	CF, 2700 ohm
R673	24366392	CF, 3900 ohm
R676	24366223	CF, 22k ohm
R676	24366223	CF, 22k ohm
R677	24366223	CF, 22k ohm
R677	24366223	CF, 22k ohm
R678	24366223	CF, 22k ohm
R679	24366223	CF, 22k ohm
R680	24366223	CF, 22k ohm
R680	24366473	CF, 47k ohm
R681	24366223	CF, 22k ohm
R684	24366229	CF, 2.2 ohm
R685	24366229	CF, 2.2 ohm
R686	24366229	CF, 2.2 ohm
R688	24366222	CF, 2200 ohm
R690	24366681	CF, 680 ohm
R691	24366681	CF, 680 ohm
R692	24366681	CF, 680 ohm
R693	24366681	CF, 680 ohm
R702	24552221	OMF, 220 ohm, 1/2W
R712	24366101	CF, 100 ohm
R715	24366393	CF, 39k ohm
R716	24366273	CF, 27k ohm
R717	24366333	CF, 33k ohm
R718	24366102	CF, 1k ohm
R722	24552471	OMF, 470 ohm, 1/2W
R723	24366151	CF, 150 ohm
R724	24366121	CF, 120 ohm
R725	24366182	CF, 1800 ohm
R730	24552100	OMF, 10 ohm, 1/2W
R731	24553331	OMF, 330 ohm, 1W
R732	24366220	CF, 22 ohm
R733	24366683	CF, 68k ohm
R734	24366220	CF, 22 ohm
R735	24366683	CF, 68k ohm
R736	24366560	CF, 56 ohm
R737	24366152	CF, 1500 ohm
R738	24366123	CF, 12k ohm
R739	24366152	CF, 1500 ohm
R740	24366560	CF, 56 ohm
R741	24366279	CF, 2.7 ohm
R742	24366279	CF, 2.7 ohm
R743	24554101	OMF, 100 ohm, 2W
R744	24366122	CF, 1200 ohm
R745	24366122	CF, 1200 ohm
R801	24009954	Metal-Glazed Resistor, 2.2M ohm, 1/2W
R802	24321568	MF, 0.56 ohm, 1/2W
R803	24382683	OMF, 68k ohm, 1W
R805	24552101	OMF, 100 ohm, 1/2W
R806	24552392	OMF, 3900 ohm, 1/2W

Location No.	Part No.	Description
R808	24019340	PTC Thermistor, 18 ohm, 290V
R810	24007492	Cement, 2.2 ohm, 20W
R811	24568271	Cement, 270 ohm, 7W
R814	24366122	CF, 1200 ohm
R815	24552102	OMF, 1k ohm, 1/2W
R816	24323759	MF, 7.5 ohm, 2W
R818	24322228	MF, 0.22 ohm, 1W
R819	24321279	MF, 2.7 ohm, 1/2W
R821	24366101	CF, 100 ohm
R822	24552103	OMF, 10k ohm, 1/2W
R823	24366272	CF, 2700 ohm
R824	24569101	Cement, 100 ohm, 10W
R825	24569100	Cement, 10 ohm, 10W
R827	24366681	CF, 680 ohm
R828	24366821	CF, 820 ohm
R829	24322228	MF, 0.22 ohm, 1W
R830	24366471	CF, 470 ohm
R831	24366471	CF, 470 ohm
R832	24366472	CF, 4700 ohm
R833	24366222	CF, 2200 ohm
R841	24531120	FR, 12 ohm, 1/2W
R842	24552392	OMF, 3900 ohm, 1/2W
R846	24366561	CF, 560 ohm
R847	24366472	CF, 4700 ohm
R890	24553333	OMF, 33k ohm, 1W
⚠R899	24005007	Metal-Glazed Resistor, 8.2M ohm, 1W
R901	24376821	CF, 820 ohm, 1/2W
R902	24376821	CF, 820 ohm, 1/2W
R903	24376821	CF, 820 ohm, 1/2W
R904	24366472	CF, 4700 ohm
R905	24366150	CF, 15 ohm
R906	24366102	CF, 1k ohm
R907	24366102	CF, 1k ohm
R908	24366102	CF, 1k ohm
R909	24366222	CF, 2200 ohm
R914	24366101	CF, 100 ohm
R915	24366560	CF, 56 ohm
R916	24366330	CF, 33 ohm
R917	24366181	CF, 180 ohm
R918	24366100	CF, 10 ohm
R920	24000818	FR, 5.6 ohm, 1W
R921	24366101	CF, 100 ohm
R922	24366101	CF, 100 ohm
R924	24366100	CF, 10 ohm
R925	24366181	CF, 180 ohm
R928	24366101	CF, 100 ohm
R929	24366101	CF, 100 ohm
R930	24366100	CF, 10 ohm
R932	24366332	CF, 3300 ohm
R933	24366750	CF, 75 ohm
R934	24366391	CF, 390 ohm
R935	24366821	CF, 820 ohm
R936	24366750	CF, 75 ohm
R937	24366181	CF, 180 ohm
R939	24366101	CF, 100 ohm
R942	24366392	CF, 3900 ohm
R943	24366392	CF, 3900 ohm
R944	24366392	CF, 3900 ohm
R945	24366330	CF, 33 ohm
R946	24366330	CF, 33 ohm
R960	24383153	OMF, 15k ohm, 2W
R961	24383153	OMF, 15k ohm, 2W

Location No.	Part No.	Description
R962	24383153	OMF, 15k ohm, 2W
R963	24383153	OMF, 15k ohm, 2W
R964	24383153	OMF, 15k ohm, 2W
R965	24383153	OMF, 15k ohm, 2W
R966	24383153	OMF, 15k ohm, 2W
R967	24383153	OMF, 15k ohm, 2W
R968	24383153	OMF, 15k ohm, 2W
R969	24366101	CF, 100 ohm
R970	24366101	CF, 100 ohm
R971	24366101	CF, 100 ohm
R977	24366681	CF, 680 ohm
R980	24366471	CF, 470 ohm
R981	24366821	CF, 820 ohm
R982	24366103	CF, 10k ohm
R983	24366222	CF, 2200 ohm
R984	24366152	CF, 1500 ohm
R985	24366471	CF, 470 ohm
R986	24366681	CF, 680 ohm
R987	24366681	CF, 680 ohm
R988	24366472	CF, 4700 ohm
R989	24366332	CF, 3300 ohm
R990	24366222	CF, 2200 ohm
R991	24366681	CF, 680 ohm
R992	24366150	CF, 15 ohm
R4034	24366332	CF, 3300 ohm
R4301	24366222	CF, 2200 ohm
R4302	24366103	CF, 10k ohm
R4303	24019090	MF, 300k ohm, 1/6W
R4305	24366471	CF, 470 ohm
R4306	24366472	CF, 4700 ohm
R4350	24066873	VR, 100k ohm, 0.3W
R4401	24366103	CF, 10k ohm
R4402	24366222	CF, 2200 ohm
R4403	24000639	MF, 22k ohm, 1/4W
R4404	24000364	MF, 1800 ohm, 1/4W
R4405	24000247	MF, 39k ohm, 1/4W
R4406	24000220	MF, 390 ohm, 1/4W
R4408	24000637	MF, 15k ohm, 1/4W
R4409	24000361	MF, 1.3k ohm, 1/4W
R4410	24552470	OMF, 47 ohm, 1/2W
R4411	24366472	CF, 4700 ohm
R4412	24366103	CF, 10k ohm
R4413	24366132	CF, 1300 ohm
R4420	24000639	MF, 22k ohm, 1/4W
R4421	24366103	CF, 10k ohm
R4422	24366473	CF, 47k ohm
R4423	24366223	CF, 22k ohm
R4424	24366103	CF, 10k ohm
R4450 ▸	24066878	VR, 2k ohm, 0.3W
RA04	24366102	CF, 1k ohm
RA05	24366102	CF, 1k ohm
RA07	24366102	CF, 1k ohm
RA08	24366102	CF, 1k ohm
RA09	24366102	CF, 1k ohm
RA10	24366102	CF, 1k ohm
RA11	24366102	CF, 1k ohm
RA12	24366473	CF, 47k ohm
RA13	24366153	CF, 15k ohm
RA16	24366102	CF, 1k ohm
RA17	24366102	CF, 1k ohm
RA18	24366102	CF, 1k ohm
RA27	24366102	CF, 1k ohm
RA33	24366102	CF, 1k ohm
RA35	24366102	CF, 1k ohm

Location No.	Part No.	Description
RA36	24366472	CF, 4700 ohm
RA37	24366101	CF, 100 ohm
RA38	24366101	CF, 100 ohm
RA49	24366470	CF, 47 ohm
RA61	24366103	CF, 10k ohm
RA62	24366103	CF, 10k ohm
RA63	24366103	CF, 10k ohm
RA64	24366103	CF, 10k ohm
RA67	24366472	CF, 4700 ohm
RA68	24366472	CF, 4700 ohm
RA70	24366333	CF, 33k ohm
RA71	24366683	CF, 68k ohm
RA72	24366223	CF, 22k ohm
RA73	24366103	CF, 10k ohm
RA74	24366103	CF, 10k ohm
RA75	24366333	CF, 33k ohm
RA76	24366103	CF, 10k ohm
RA77	24366472	CF, 4700 ohm
RA78	24366472	CF, 4700 ohm
RA79	24366103	CF, 10k ohm
RB01	24366271	CF, 270 ohm
RB02	24366271	CF, 270 ohm
RB09	24366470	CF, 47 ohm
RB10	24366101	CF, 100 ohm
RB11	24366103	CF, 10k ohm
RB30	24366103	CF, 10k ohm
RB40	24366103	CF, 10k ohm
RB41	24366182	CF, 1800 ohm
RB42	24366102	CF, 1k ohm
RB43	24366103	CF, 10k ohm
RB44	24366103	CF, 10k ohm
RB45	24366101	CF, 100 ohm
RF01	24366222	CF, 2200 ohm
RF03	24366472	CF, 4700 ohm
RF04	24366472	CF, 4700 ohm
RF06	24366102	CF, 1k ohm
RF08	24366100	CF, 10 ohm
RF09	24366100	CF, 10 ohm
RF10	24366100	CF, 10 ohm
RF11	24366103	CF, 10k ohm
RF12	24366101	CF, 100 ohm
RF13	24366101	CF, 100 ohm
RF14	24366101	CF, 100 ohm
RF15	24366103	CF, 10k ohm
RF16	24366471	CF, 470 ohm
RF20	24366472	CF, 4700 ohm
RF21	24366102	CF, 1k ohm
RF22	24366102	CF, 1k ohm
RF26	24366102	CF, 1k ohm
RG01	24366223	CF, 22k ohm
RG02	24366223	CF, 22k ohm
RG03	24366101	CF, 100 ohm
RG04	24366101	CF, 100 ohm
RG05	24366101	CF, 100 ohm
RG07	24366101	CF, 100 ohm
RG08	24366101	CF, 100 ohm
RG09	24366103	CF, 10k ohm
RG10	24366103	CF, 10k ohm
RG11	24366103	CF, 10k ohm
RG12	24366103	CF, 10k ohm
RQ07	24366103	CF, 10k ohm
RQ08	24366102	CF, 1k ohm
RQ09	24366102	CF, 1k ohm
RQ10	24366102	CF, 1k ohm

Location No.	Part No.	Description
RQ11	24366561	CF, 560 ohm
RQ12	24366561	CF, 560 ohm
RQ60	24366101	CF, 100 ohm
RQ61	24366103	CF, 10k ohm
RQ62	24366103	CF, 10k ohm
RQ63	24366103	CF, 10k ohm
RQ64	24366104	CF, 100k ohm
RR12	24366151	CF, 150 ohm
RR13	24366151	CF, 150 ohm
RR14	24366151	CF, 150 ohm
RR21	24366102	CF, 1k ohm
RR22	24366102	CF, 1k ohm
RR23	24366562	CF, 5600 ohm
RR24	24366332	CF, 3300 ohm
RR25	24366362	CF, 3600 ohm
RR27	24366202	CF, 2k ohm
RR29	24366101	CF, 100 ohm
RR30	24366101	CF, 100 ohm
RR33	24366101	CF, 100 ohm
RR34	24366102	CF, 1k ohm
RR35	24366102	CF, 1k ohm
RR36	24366103	CF, 10k ohm
RR38	24366222	CF, 2200 ohm
RR39	24366222	CF, 2200 ohm
RR40	24366471	CF, 470 ohm
RR41	24366473	CF, 47k ohm
RR42	24366101	CF, 100 ohm
RR43	24366101	CF, 100 ohm
RR44	24366101	CF, 100 ohm
RR50	24366101	CF, 100 ohm
RR51	24366101	CF, 100 ohm
RR52	24366101	CF, 100 ohm
RR60	24366472	CF, 4700 ohm
RR61	24366392	CF, 3900 ohm
RR62	24366242	CF, 2400 ohm
RR63	24366102	CF, 1k ohm
RR64	24366132	CF, 1300 ohm
RR65	24366102	CF, 1k ohm
RR66	24366101	CF, 100 ohm
RR67	24366101	CF, 100 ohm
RS01	24366681	CF, 680 ohm
RS02	24366681	CF, 680 ohm
RS03	24366101	CF, 100 ohm
RS04	24366101	CF, 100 ohm
RS05	24366472	CF, 4700 ohm
RS06	24366472	CF, 4700 ohm
RS07	24366472	CF, 4700 ohm
RS08	24366472	CF, 4700 ohm
RS09	24366472	CF, 4700 ohm
RS10	24366472	CF, 4700 ohm
RS11	24366101	CF, 100 ohm
RS13	24366101	CF, 100 ohm
RS14	24366101	CF, 100 ohm
RS15	24366104	CF, 100k ohm
RS16	24366104	CF, 100k ohm
RS17	24366223	CF, 22k ohm
RS18	24366223	CF, 22k ohm
RS19	24366102	CF, 1k ohm
RS20	24366102	CF, 1k ohm
RS21	24366222	CF, 2200 ohm
RS22	24366222	CF, 2200 ohm
RS23	24366101	CF, 100 ohm
RS24	24366101	CF, 100 ohm
RS27	24366104	CF, 100k ohm

Location No.	Part No.	Description
RS28	24366104	CF, 100k ohm
RS29	24366223	CF, 22k ohm
RS30	24366223	CF, 22k ohm
RS31	24366103	CF, 10k ohm
RS32	24366104	CF, 100k ohm
RS35	24366223	CF, 22k ohm
RS36	24366223	CF, 22k ohm
RS37	24366104	CF, 100k ohm
RS38	24366104	CF, 100k ohm
RS43	24366681	CF, 680 ohm
RS44	24366681	CF, 680 ohm
RS45	24366681	CF, 680 ohm
RS46	24366681	CF, 680 ohm
RV01	24366101	CF, 100 ohm
RV02	24366101	CF, 100 ohm
RV03	24366101	CF, 100 ohm
RV04	24366101	CF, 100 ohm
RV05	24366101	CF, 100 ohm
RV06	24366101	CF, 100 ohm
RV07	24366162	CF, 1600 ohm
RV08	24366162	CF, 1600 ohm
RV09	24366101	CF, 100 ohm
RV10	24366101	CF, 100 ohm
RV12	24366681	CF, 680 ohm
RV13	24366681	CF, 680 ohm
RV16	24366471	CF, 470 ohm
RV18	24366123	CF, 12k ohm
RV19	24366101	CF, 100 ohm
RV22	24366102	CF, 1k ohm
RV23	24552101	OMF, 100 ohm, 1/2W
RV25	24366101	CF, 100 ohm
RV26	24366181	CF, 180 ohm
RV27	24366750	CF, 75 ohm
RV28	24366683	CF, 68k ohm
RV29	24366273	CF, 27k ohm
RV30	24366750	CF, 75 ohm
RV32	24366750	CF, 75 ohm
RV33	24366123	CF, 12k ohm
RV34	24366123	CF, 12k ohm
RV35	24366103	CF, 10k ohm
RV36	24366101	CF, 100 ohm
RV38	24366750	CF, 75 ohm
RV40	24366471	CF, 470 ohm
RV60	24366471	CF, 470 ohm
RV61	24552101	OMF, 100 ohm, 1/2W
RV62	24366101	CF, 100 ohm
RV63	24552151	OMF, 150 ohm, 1/2W
RV64	24366750	CF, 75 ohm
RV65	24552101	OMF, 100 ohm, 1/2W
RV66	24366101	CF, 100 ohm
RV67	24552151	OMF, 150 ohm, 1/2W
RV68	24366750	CF, 75 ohm
RV70	24366101	CF, 100 ohm
RV71	24366472	CF, 4700 ohm
RV78	24366221	CF, 220 ohm
RV79	24366680	CF, 68 ohm
RV80	24366102	CF, 1k ohm
RV81	24366472	CF, 4700 ohm
RV81	24366750	CF, 75 ohm
RV82	24366153	CF, 15k ohm
RV83	24366103	CF, 10k ohm
RV85	24366750	CF, 75 ohm
RV86	24366750	CF, 75 ohm
RV87	24366750	CF, 75 ohm

Location No.	Part No.	Description
RV89	24366750	CF, 75 ohm
RV90	24366681	CF, 680 ohm
RV91	24366681	CF, 680 ohm
RV92	24366100	CF, 10 ohm
RV93	24366104	CF, 100k ohm
RV94	24366103	CF, 10k ohm
RV95	24366222	CF, 2200 ohm
RV96	24366391	CF, 390 ohm
RV97	24366101	CF, 100 ohm
RV98	24366750	CF, 75 ohm
RX103	24871471	Chip, 470 ohm, 1/8W
RX104	24011105	Chip, 1M ohm, 1/20W
RX105	24011271	Chip, 270 ohm, 1/20W
RX106	24011102	Chip, 1k ohm, 1/20W
RX108	24011331	Chip, 330 ohm, 1/20W
RX109	24871221	Chip, 220 ohm, 1/8W
RX110	24011680	Chip, 68 ohm, 1/20W
RX111	24011561	Chip, 560 ohm, 1/20W
RX112	24871221	Chip, 220 ohm, 1/8W
RX120	24011470	Chip, 47 ohm, 1/20W
RX121	24011152	Chip, 1.5k ohm, 1/20W
RX123	24011331	Chip, 330 ohm, 1/20W
RX125	24011102	Chip, 1k ohm, 1/20W
RX126	24871471	Chip, 470 ohm, 1/8W
RX127	24011471	Chip, 470 ohm, 1/20W
RX128	24871471	Chip, 470 ohm, 1/8W
RX136	24011470	Chip, 47 ohm, 1/20W
RX137	24011152	Chip, 1.5k ohm, 1/20W
RX140	24011102	Chip, 1k ohm, 1/20W
RX141	24871471	Chip, 470 ohm, 1/8W
RX142	24011120	Chip, 12 ohm, 1/20W
RX143	24011561	Chip, 560 ohm, 1/20W
RX144	24871221	Chip, 220 ohm, 1/8W
RX145	24011331	Chip, 330 ohm, 1/20W
RX146	24011470	Chip, 47 ohm, 1/20W
RX201	24011103	Chip, 10k ohm, 1/20W
RX202	24011681	Chip, 680 ohm, 1/20W
RX203	24011151	Chip, 150 ohm, 1/20W
RX204	24011472	Chip, 4.7k ohm, 1/20W
RX205	24011332	Chip, 3.3k ohm, 1/20W
RX206	24011331	Chip, 330 ohm, 1/20W
RX207	24011102	Chip, 1k ohm, 1/20W
RX208	24011332	Chip, 3.3k ohm, 1/20W
RX209	24011681	Chip, 680 ohm, 1/20W
RX223	24011220	Chip, 22 ohm, 1/20W
RX225	24011220	Chip, 22 ohm, 1/20W
RX230	24011220	Chip, 22 ohm, 1/20W
RX231	24011220	Chip, 22 ohm, 1/20W
RX301	24011151	Chip, 150 ohm, 1/20W
RX302	24011102	Chip, 1k ohm, 1/20W
RX303	24011220	Chip, 22 ohm, 1/20W
RX304	24871331	Chip, 330 ohm, 1/8W
RX305	24011221	Chip, 220 ohm, 1/20W
RX306	24011821	Chip, 820 ohm, 1/20W
RX307	24011220	Chip, 22 ohm, 1/20W
RX308	24871331	Chip, 330 ohm, 1/8W
RX309	24011221	Chip, 220 ohm, 1/20W
RX310	24011821	Chip, 820 ohm, 1/20W
RX311	24011220	Chip, 22 ohm, 1/20W
RX312	24871331	Chip, 330 ohm, 1/8W
RX313	24871331	Chip, 330 ohm, 1/8W
RX314	24871331	Chip, 330 ohm, 1/8W
RX315	24871471	Chip, 470 ohm, 1/8W
RX400	24011102	Chip, 1k ohm, 1/20W

Location No.	Part No.	Description
RX401	24011471	Chip, 470 ohm, 1/20W
RX402	24011471	Chip, 470 ohm, 1/20W
RX403	24011471	Chip, 470 ohm, 1/20W
RX404	24011102	Chip, 1k ohm, 1/20W
RX405	24011221	Chip, 220 ohm, 1/20W
RX406	24011221	Chip, 220 ohm, 1/20W
RX407	24011221	Chip, 220 ohm, 1/20W
RX408	24011221	Chip, 220 ohm, 1/20W
RX409	24011221	Chip, 220 ohm, 1/20W
RZ01	24366471	CF, 470 ohm
RZ02	24366152	CF, 1500 ohm
RZ04	24366332	CF, 3300 ohm
RZ05	24366332	CF, 3300 ohm
RZ06	24366821	CF, 820 ohm
RZ07	24366222	CF, 2200 ohm
RZ08	24366302	CF, 3k ohm
RZ12	24366471	CF, 470 ohm
RZ18	24366821	CF, 820 ohm
RZ19	24366471	CF, 470 ohm
RZ20	24366122	CF, 1200 ohm
RZ21	24366680	CF, 68 ohm
RZ22	24366101	CF, 100 ohm
RZ23	24366821	CF, 820 ohm
RZ24	24366821	CF, 820 ohm
RZ25	24366101	CF, 100 ohm
RZ26	24366101	CF, 100 ohm
RZ28	24366821	CF, 820 ohm
RZ29	24366331	CF, 330 ohm
RZ30	24366331	CF, 330 ohm
RZ31	24366102	CF, 1k ohm

COILS & TRANSFORMERS

Location No.	Part No.	Description
L101	23221803	Coil, Choke, TLN3040D
L203	23238708	Coil, Peaking, TRF4330AJ
L301	23103859	Coil (Ferrite Bead), TEM2011
L302	23289101	Coil, Peaking, TRF4101AF
L400	23289101	Coil, Peaking, TRF4101AF
L410	23103859	Coil (Ferrite Bead), TEM2011
L441	23233966	Coil, Linearity, TLN2158AY
L442	23248164	Coil, Choke, TLN3437AD
L443	23248165	Coil, Choke, TLN3438AD
L449	23103859	Coil (Ferrite Bead), TEM2011
L461	23248111	Coil, Choke, TLN3349D
L470	23103859	Coil (Ferrite Bead), TEM2011
L491	23211923	Coil, Choke, AT4043/100
L501	23280024	Coil, Peaking, TRF4221AZ
L502	23103824	Coil, TEM2028K
L503	23289470	Coil, Peaking, TRF4470AF
L504	23103824	Coil, TEM2028K
L507	23103824	Coil, TEM2028K
L508	23103824	Coil, TEM2028K
L509	23103824	Coil, TEM2028K
L511	23103824	Coil, TEM2028K
L512	23103824	Coil, TEM2028K
L513	23103824	Coil, TEM2028K
L514	23103824	Coil, TEM2028K
L515	23103824	Coil, TEM2028K
L676	23238562	Coil, Peaking, TRF4109AJ
L677	23238720	Coil, Peaking, TRF4339AJ
L682	23289109	Coil, Peaking, TRF41R0AF
L683	23289339	Coil, Peaking, TRF43R3AF
L684	23238562	Coil, Peaking, TRF4109AJ
L685	23238562	Coil, Peaking, TRF4109AJ
L701	23289100	Coil, Peaking, TRF4100AF

Location No.	Part No.	Description
L702	23261974	Coil, Choke, HC5-035
L704	23103859	Coil (Ferrite Bead), TEM2011
L705	23103859	Coil (Ferrite Bead), TEM2011
L811	23103859	Coil (Ferrite Bead), TEM2011
L814	23221747	Coil, Choke, TRF9253D
L875	23280016	Coil, Peaking, TRF4100AZ
L883	23221747	Coil, Choke, TRF9253D
L885	23248073	Coil, Choke, TLN3299D
L886	23103859	Coil (Ferrite Bead), TEM2011
L889	23280016	Coil, Peaking, TRF4100AZ
L891	23103859	Coil (Ferrite Bead), TEM2011
L892	23103859	Coil (Ferrite Bead), TEM2011
L893	23222694	Coil, Width, TLN2026
L896	23103859	Coil (Ferrite Bead), TEM2011
L897	23222694	Coil, Width, TLN2026
⚠L901	23200276	Coil, Degaussing, TSB-2330BR
L902	23289101	Coil, Peaking, TRF4101AF
L903	23289101	Coil, Peaking, TRF4101AF
L904	23289101	Coil, Peaking, TRF4101AF
L905	23289220	Coil, Peaking, TRF4220AF
L906	23289220	Coil, Peaking, TRF4220AF
L907	23289220	Coil, Peaking, TRF4220AF
L908	23289100	Coil, Peaking, TRF4100AF
L910	23289109	Coil, Peaking, TRF41R0AF
L911	23289101	Coil, Peaking, TRF4101AF
L912	23289150	Coil, Peaking, TRF4150AF
L913	23289150	Coil, Peaking, TRF4150AF
L914	23289150	Coil, Peaking, TRF4150AF
L4400	23221886	Coil, Choke, TLN3073
L4430	23289680	Coil, Peaking, TRF4680AF
LA01	23289100	Coil, Peaking, TRF4100AF
LC05	23238562	Coil, Peaking, TRF4109AJ
LC06	23103859	Coil (Ferrite Bead), TEM2011
LC07	23238562	Coil, Peaking, TRF4109AJ
LC08	23238562	Coil, Peaking, TRF4109AJ
LC30	23238562	Coil, Peaking, TRF4109AJ
LC31	23238562	Coil, Peaking, TRF4109AJ
LF01	23238506	Coil, Peaking, TRF4229AJ
LF02	23238506	Coil, Peaking, TRF4229AJ
LF03	23238506	Coil, Peaking, TRF4229AJ
LF04	23238506	Coil, Peaking, TRF4229AJ
LF06	23238562	Coil, Peaking, TRF4109AJ
LF07	23238562	Coil, Peaking, TRF4109AJ
LF08	23238714	Coil, Peaking, TRF4100AJ
LF09	23238714	Coil, Peaking, TRF4100AJ
LF10	23238562	Coil, Peaking, TRF4109AJ
LF11	23289109	Coil, Peaking, TRF41R0AF
LF13	23289100	Coil, Peaking, TRF4100AF
LQ03	23238511	Coil, Peaking, TRF4221AJ
LQ04	23237969	Coil, Peaking, TRF4331AC
LR03	23237969	Coil, Peaking, TRF4331AC
LV05	23103824	Coil, TEM2028K
LV06	23289109	Coil, Peaking, TRF41R0AF
LV07	23289109	Coil, Peaking, TRF41R0AF
LV08	23289330	Coil, Peaking, TRF4330AF
LV09	23289100	Coil, Peaking, TRF4100AF
LV10	23103824	Coil, TEM2028K
LV11	23103824	Coil, TEM2028K
LV12	23103824	Coil, TEM2028K
LV42	23289100	Coil, Peaking, TRF4100AF
LV43	23289100	Coil, Peaking, TRF4100AF
LV49	23103824	Coil, TEM2028K
LX101	23103822	Chip (Ferrite Bead), TEM2117T
LX102	23103822	Chip (Ferrite Bead), TEM2117T

Location No.	Part No.	Description
LX103	23103822	Chip (Ferrite Bead), TEM2117T
LX105	24000824	Chip Jumper, 2125 Type
LX106	23103822	Chip (Ferrite Bead), TEM2117T
LX107	23289270	Coil, Peaking, TRF4270AF
LX108	23103822	Chip (Ferrite Bead), TEM2117T
LX109	23103822	Chip (Ferrite Bead), TEM2117T
LX110	23103822	Chip (Ferrite Bead), TEM2117T
LX111	23289270	Coil, Peaking, TRF4270AF
LX112	24000824	Chip Jumper, 2125 Type
LX113	23103822	Chip (Ferrite Bead), TEM2117T
LX114	23245828	Coil, Peaking, TRF46R8CB
LX201	23103822	Chip (Ferrite Bead), TEM2117T
LX202	23103822	Chip (Ferrite Bead), TEM2117T
LX203	23103822	Chip (Ferrite Bead), TEM2117T
LX209	23103822	Chip (Ferrite Bead), TEM2117T
LX210	23103822	Chip (Ferrite Bead), TEM2117T
LX212	23103822	Chip (Ferrite Bead), TEM2117T
LX214	23103822	Chip (Ferrite Bead), TEM2117T
LX215	23103822	Chip (Ferrite Bead), TEM2117T
LX216	23103822	Chip (Ferrite Bead), TEM2117T
LX217	23103822	Chip (Ferrite Bead), TEM2117T
LX218	24000824	Chip Jumper, 2125 Type
LX301	23103822	Chip (Ferrite Bead), TEM2117T
LX302	23103822	Chip (Ferrite Bead), TEM2117T
LX303	24000824	Chip Jumper, 2125 Type
LX306	23103822	Chip (Ferrite Bead), TEM2117T
LX307	23289229	Coil, Peaking, TRF42R2AF
LX308	23289100	Coil, Peaking, TRF4100AF
LX309	23289100	Coil, Peaking, TRF4100AF
LX400	23289109	Coil, Peaking, TRF41R0AF
LX401	23289109	Coil, Peaking, TRF41R0AF
LX402	23289109	Coil, Peaking, TRF41R0AF
LX403	23289109	Coil, Peaking, TRF41R0AF
LX404	23289109	Coil, Peaking, TRF41R0AF
LX405	23289109	Coil, Peaking, TRF41R0AF
LX406	23289109	Coil, Peaking, TRF41R0AF
LX407	23289109	Coil, Peaking, TRF41R0AF
LX408	23289109	Coil, Peaking, TRF41R0AF
LX409	23289109	Coil, Peaking, TRF41R0AF
LZ01	23238712	Coil, Peaking, TRF4150AJ
LZ02	23238716	Coil, Peaking, TRF4689AJ
LZ03	23238716	Coil, Peaking, TRF4689AJ
LZ04	23238709	Coil, Peaking, TRF4270AJ
LZ05	23238716	Coil, Peaking, TRF4689AJ
LZ06	23238709	Coil, Peaking, TRF4270AJ
LZ07	23238709	Coil, Peaking, TRF4270AJ
LZ08	23238707	Coil, Peaking, TRF4390AJ
LZ09	70131060	Baze Filter, ZBF253D-00
LZ10	70131060	Baze Filter, ZBF253D-00
LZ11	23289270	Coil, Peaking, TRF4270AF
T401	23224371	Transformer, Horiz, Drive, TLN1080AH
⚠T461	23236513	Transformer, Flyback, TFB4137AR
T461A	23236447	ANODE4115B
T461B	23236447	ANODE4115B
T461C	23236447	ANODE4115B
T801	23211670	Line Filter, TRF3164G
⚠T803	23217350	Transformer, Converter, TPW3367AR
T804	23211670	Line Filter, TRF3164G

Location No.	Part No.	Description
SEMICONDUCTORS		
Q200	A6330059	Transistor, 2SC2482(C)
Q201	A6534040	Transistor, 2SA1015-Y
Q204	A6317440	Transistor, 2SC1815-Y
Q205	A6317440	Transistor, 2SC1815-Y
Q207	A6342200	Transistor, 2CS2878-A
Q301	23905610	IC, LA7846N
Q302	B0384625	IC, TA8859CP
Q303	A6534040	Transistor, 2SA1015-Y
Q304	A6317440	Transistor, 2SC1815-Y
Q360	A6002040	Transistor, RN1204
Q361	A6002040	Transistor, RN1204
Q362	A6002050	Transistor, RN1205
Q370	A6534040	Transistor, 2SA1015-Y
Q402	A6325413	Transistor, 2SC2235-O
Q404	A6371775	Transistor, 2SC5144
Q404B	A8012650	Spacer, AC263
Q404D	72471082	Screw, BRDT2W3X10 SZN
Q418	23314141	Transistor, 2SC3852
Q418B	23035308	Screw, BTB3X8SZN
Q420	23314141	Transistor, 2SC3852
Q420B	23035308	Screw, BTB3X8SZN
Q421	A6317440	Transistor, 2SC1815-Y
Q430	23314141	Transistor, 2SC3852
Q460	23314850	Transistor, 2SA1788, E
Q460B	23037312	Screw, BTBW3X12SZN
Q461	A6317440	Transistor, 2SC1815-Y
Q462	A6317440	Transistor, 2SC1815-Y
Q470	A6317440	Transistor, 2SC1815-Y
Q501	B0385990	IC, TA1259N
Q502	A6317440	Transistor, 2SC1815-Y
Q503	A6317440	Transistor, 2SC1815-Y
Q510	A6002060	Transistor, RN1206
Q518	A6317440	Transistor, 2SC1815-Y
Q612	A6534040	Transistor, 2SA1015-Y
Q670	B0377308	IC, TA8256BH
Q670B	70391355	Screw, BITTB3X8 SZN
Q671	A6342200	Transistor, 2CS2878-A
Q672	A6342200	Transistor, 2CS2878-A
Q688	A6002040	Transistor, RN1204
Q705	A6317440	Transistor, 2SC1815-Y
Q706	A6317440	Transistor, 2SC1815-Y
Q707	A6734590	Transistor, 2SC752(G)TM-Y
Q709	A6317440	Transistor, 2SC1815-Y
Q710	A6534040	Transistor, 2SA1015-Y
Q711	23314911	Transistor, 2SB1569A E
Q712	23314914	Transistor, 2SD2400A E
Q719	A6319300	Transistor, 2SC1959-Y
Q801	23905084	IC, STR-S6709, L
Q802	23314141	Transistor, 2SC3852
⚠Q826	A8643108	Photo Coupler, TLP621(GR-LF
Q830	23314141	Transistor, 2SC3852
Q830B	70391355	Screw, BITTB3X8 SZN
Q831	23314141	Transistor, 2SC3852
Q831B	70391355	Screw, BITTB3X8 SZN
Q832	23905977	IC, PQ09RD11
Q832B	70391356	Screw, BITTB3X10 SZN
Q840	23318299	IC, L78MR05
Q901	A6368700	Transistor, 2CS4544
Q902	A6317440	Transistor, 2SC1815-Y
Q903	A6368700	Transistor, 2CS4544
Q904	A6317440	Transistor, 2SC1815-Y
Q905	A6368700	Transistor, 2CS4544
Q906	A6317440	Transistor, 2SC1815-Y

Location No.	Part No.	Description
Q907	A6509140	Transistor, 2SA562TM-Y
Q908	A6321240	Transistor, 2SC2120-Y
Q910	A6317440	Transistor, 2SC1815-Y
Q911	A6317440	Transistor, 2SC1815-Y
Q912	A6534040	Transistor, 2SA1015-Y
Q913	A6534040	Transistor, 2SA1015-Y
Q914	A6317440	Transistor, 2SC1815-Y
Q4321	A6002040	Transistor, RN1204
Q4420	23316816	IC, LA7860
Q4421	A6002040	Transistor, RN1204
Q4423	A6325413	Transistor, 2SC2235-O
QA01	23000177	IC, TMP87CS38N-1C14
QA02	23904666	IC, NM24C08EN
QA04	A6002040	Transistor, RN1204
QA05	A6734590	Transistor, 2SC752(G)TM-Y
QB01	A6317440	Transistor, 2SC1815-Y
QB30	A6317440	Transistor, 2SC1815-Y
QF01	23906822	IC, SDA5273-2S C
QF03	A6317440	Transistor, 2SC1815-Y
QF04	A6734590	Transistor, 2SC752(G)TM-Y
QG01	B0385643	IC, TA1216AN
QQ02	B0383881	IC, TA8772AN
QQ03	23314794	Transistor, 2PC1815Y
QQ04	23314794	Transistor, 2PC1815Y
QQ05	23314794	Transistor, 2PC1815Y
QQ06	A6002030	Transistor, RN1203
QQ07	23314794	Transistor, 2PC1815Y
QQ08	23314794	Transistor, 2PC1815Y
QR21	23904807	IC, MC14577CP
QR22	23905603	IC,TDA8443B
QR23	A6534040	Transistor, 2SA1015-Y
QR24	A6534040	Transistor, 2SA1015-Y
QR25	23904807	IC, MC14577CP
QS01	A6342200	Transistor, 2CS2878-A
QS02	A6342200	Transistor, 2CS2878-A
QS03	A6342200	Transistor, 2CS2878-A
QS04	A6342200	Transistor, 2CS2878-A
QS05	A6342200	Transistor, 2CS2878-A
QS06	A6342200	Transistor, 2CS2878-A
QS07	A6010040	Transistor, RN2004
QS08	A6342200	Transistor, 2CS2878-A
QS09	A6342200	Transistor, 2CS2878-A
QV01	B0385650	IC, TA1218N
QV02	A6317440	Transistor, 2SC1815-Y
QV06	A6534040	Transistor, 2SA1015-Y
QV07	A6342200	Transistor, 2CS2878-A
QV08	A6317440	Transistor, 2SC1815-Y
QV09	A6317440	Transistor, 2SC1815-Y
QV10	A6317440	Transistor, 2SC1815-Y
QV11	A6534040	Transistor, 2SA1015-Y
QV12	A6317440	Transistor, 2SC1815-Y
QV14	A6317440	Transistor, 2SC1815-Y
QV80	A6534040	Transistor, 2SA1015-Y
QX101	23314204	Transistor, 2SC2412K, Q
QX102	70128490	IC, MM1031XMR
QX103	23314345	Transistor, IMZ1 T108
QX104	23314204	Transistor, 2SC2412K, Q
QX105	A6030670	IC, TC7S66F
QX106	23905190	IC, TLC5510INS
QX108	23314204	Transistor, 2SC2412K, Q
QX109	23314344	Transistor, IMX1 T110
QX110	A6030670	IC, TC7S66F
QX111	23314204	Transistor, 2SC2412K, Q
QX112	A6030670	IC, TC7S66F

Location No.	Part No.	Description
QX114	23905190	IC, TLC5510INS
QX116	23314204	Transistor, 2SC2412K, Q
QX117	23314344	Transistor, IMX1 T110
QX118	A6030670	IC, TC7S66F
QX119	23314204	Transistor, 2SC2412K, Q
QX120	A6030670	IC, TC7S66F
QX201	A6361770	Transistor, 2SC3437-Y
QX202	A6030871	IC, TC7W04F(BRA)
QX203	23905013	IC, TLC29321PW
QX204	B0370000	IC, TC78L05F
QX205	23905013	IC, TLC29321PW
QX211	B0508717	IC, TC190G04AF-0
QX212	23906747	IC, M518221A-30Z
QX213	23906747	IC, M518221A-30Z
QX214	B0488966	IC, TC74AC74F
QX216	A6030640	IC, TC7S32F
QX301	23319052	IC, MB40978PFQ
QX302	23314204	Transistor, 2SC2412K, Q
QX303	23314204	Transistor, 2SC2412K, Q
QX304	23314204	Transistor, 2SC2412K, Q
QX305	23314204	Transistor, 2SC2412K, Q
QX306	23314204	Transistor, 2SC2412K, Q
QX307	23314204	Transistor, 2SC2412K, Q
QZ01	B0410688	IC, TC9090AN
QZ02	A6317440	Transistor, 2SC1815-Y
QZ03	A6317440	Transistor, 2SC1815-Y
QZ04	A6317440	Transistor, 2SC1815-Y
QZ06	A6317440	Transistor, 2SC1815-Y
D101	23316411	Diode, Zener, HZT33-12
D201	23115599	Diode, 1N4148
D240	23316553	Diode, 1SS145
D301	23118479	Diode, BYD33J
D302	23118479	Diode, BYD33J
D303	23316794	Diode, SC570ALFE2
D306	23115599	Diode, 1N4148
D312	23115599	Diode, 1N4148
D370	23316658	Diode, Zener, MTZJ3.6A
D371	23115599	Diode, 1N4148
D372	23115599	Diode, 1N4148
D404	23357043	Diode, FMQ-G5GS
D404C	72471082	Screw, BRDT2W3X10 SZN
D406	23118479	Diode, BYD33J
D418	23316749	Diode, Zener, MTZJ30A
D419	23316716	Diode, Zener, MTZJ11B
D420	23316716	Diode, Zener, MTZJ11B
D421	23316680	Diode, Zener, MTZJ7.5A
D422	23316726	Diode, Zener, MTZJ15C
D431	23316678	Diode, Zener, MTZJ6.8B
D432	23316678	Diode, Zener, MTZJ6.8B
D436	23115599	Diode, 1N4148
D441	23316687	Diode, Zener, MTZJ9.1B
D460	23118479	Diode, BYD33J
D461	23316582	Diode, ERC20-06
D463	23115599	Diode, 1N4148
D464	23316718	Diode, Zener, MTZJ12A
D466	23316672	Diode, Zener, MTZJ5.6B
D467	23118479	Diode, BYD33J
D468	23316718	Diode, Zener, MTZJ12A
D474	23316719	Diode, Zener, MTZJ12B
D490	23115599	Diode, 1N4148
D498	23316719	Diode, Zener, MTZJ12B
D499	23115599	Diode, 1N4148
D501	23115599	Diode, 1N4148
D502	23115599	Diode, 1N4148

Location No.	Part No.	Description
D611	23115599	Diode, 1N4148
D612	23115599	Diode, 1N4148
D613	23115599	Diode, 1N4148
D617	23115599	Diode, 1N4148
D670	23115599	Diode, 1N4148
D671	23115599	Diode, 1N4148
D674	23115599	Diode, 1N4148
D675	23115599	Diode, 1N4148
D704	23115599	Diode, 1N4148
D705	23115599	Diode, 1N4148
D715	23115599	Diode, 1N4148
D721	23115599	Diode, 1N4148
D801	23357041	Diode, LN6SB60-F05
D801B	23035308	Screw, BTB 3X8 SZN
D803	23118479	Diode, BYD33J
D804	23316678	Diode, Zener, MTZJ6.8B
D805	23115599	Diode, 1N4148
D806	23118479	Diode, BYD33J
D808	23118479	Diode, BYD33J
D809	23316672	Diode, Zener, MTZJ5.6B
D810	23115599	Diode, 1N4148
D811	23115599	Diode, 1N4148
D812	23118451	Diode, RU-4A LF-L1
D815	23316725	Diode, Zener, MTZJ15B
D828	23115599	Diode, 1N4148
D883	23316406	Diode, FML-G16S
D885	23316184	Diode, FML-G12S
D891	23316184	Diode, FML-G12S
D892	23316184	Diode, FML-G12S
D892	23316673	Diode, Zener, MTZJ5.6C
D893	23316672	Diode, Zener, MTZJ5.6B
D896	23118479	Diode, BYD33J
D901	23115599	Diode, 1N4148
D903	23115599	Diode, 1N4148
D904	23115599	Diode, 1N4148
D905	23115599	Diode, 1N4148
D906	23115599	Diode, 1N4148
D907	23115599	Diode, 1N4148
D908	23115599	Diode, 1N4148
D909	23115599	Diode, 1N4148
D910	23115599	Diode, 1N4148
D911	23118479	Diode, BYD33J
D4301	23316726	Diode, Zener, MTZJ15C
DB01	23358505	Diode (LED), SLR56VC196F
DB02	23358503	Diode (LED), SCL003MC3FX
DB30	23115599	Diode, 1N4148
DF01	23316654	Diode, Zener, MTZJ3.0A
DQ01	23115599	Diode, 1N4148
DR01	23316719	Diode, Zener, MTZJ12B
DR02	23316719	Diode, Zener, MTZJ12B
DR03	23316719	Diode, Zener, MTZJ12B
DR04	23316719	Diode, Zener, MTZJ12B
DV01	23316687	Diode, Zener, MTZJ9.1B
DV02	23316687	Diode, Zener, MTZJ9.1B
DV03	23316687	Diode, Zener, MTZJ9.1B
DV04	23316687	Diode, Zener, MTZJ9.1B
DV05	23316687	Diode, Zener, MTZJ9.1B
DV06	23316687	Diode, Zener, MTZJ9.1B
DV07	23316687	Diode, Zener, MTZJ9.1B
DV10	23115599	Diode, 1N4148
DV11	23115599	Diode, 1N4148
DV12	23316687	Diode, Zener, MTZJ9.1B
DV80	23115599	Diode, 1N4148
DZ01	23316690	Diode, Zener, MTZJ10B

Location No.	Part No.	Description
MISCELLANEOUS		
B202	23470427	Frame, Terminal
B221	23037312	Screw, BTBW 3X12 SZN
B226	23035312	Screw, BTB 3X12 SZN
BB02	23903022	Socket, 8P
BB03	23903022	Socket, 8P
BB04	23903022	Socket, 8P
BB05	23903022	Socket, 8P
BB06	23903022	Socket, 8P
BB07	23903022	Socket, 8P
BB21	23903022	Socket, 8P
BB21A	23368627	Plug, 8P
BB41	23903022	Socket, 8P
BB41A	23368627	Plug, 8P
BB51	23903022	Socket, 8P
BB51A	23368627	Plug, 8P
BB61	23903022	Socket, 8P
BB61A	23368627	Plug, 8P
BB71	23903022	Socket, 8P
BB71A	23368627	Plug, 8P
BB81	23903022	Socket, 8P
BB81A	23368627	Plug, 8P
⚠F470	23144502	Fuse, 1.0A, 250V
F470A	23165433	Holder, Fuse
F470B	23165433	Holder, Fuse
⚠F801	23144507	Fuse, 3.15A, 250V
F801A	23165433	Holder, Fuse
⚠F802	23144506	Fuse, 2.5A, 250V
F802A	23165433	Holder, Fuse
G224	24366271	CF, 270 ohm
G311	24366332	CF, 3300 ohm
G333	23238702	Coil, Peaking, TRF4101AJ
G401	23103859	Coil (Ferrite Bead), TEM2011
G402	23103859	Coil (Ferrite Bead), TEM2011
G403	23103859	Coil (Ferrite Bead), TEM2011
G404	23103859	Coil (Ferrite Bead), TEM2011
G430	A7568460	Diode, TVR-1B
G510	23289470	Coil, Peaking, TRF4470AF
G516	24366101	CF, 100 ohm
G517	24366101	CF, 100 ohm
G525	24366103	CF, 10k ohm
G601	23238714	Coil, Peaking, TRF4100AJ
G602	23238714	Coil, Peaking, TRF4100AJ
G812	23103859	Coil (Ferrite Bead), TEM2011
GL41	23237969	Coil, Peaking, TRF4331AC
GL42	23237969	Coil, Peaking, TRF4331AC
GV13	24366681	CF, 680 ohm
GV17	23289109	Coil, Peaking, TRF41R0AF
GV80	24366681	CF, 680 ohm
GV81	24366681	CF, 680 ohm
H002	23148250	Module, MVGS44A, BG/DK IGR(IM9)
KB01	23904946	Remote Sensor, RPM-676CBR-S
P104	23368103	Plug, 3P
P402A	23902780	Socket, B-B, 11P
P402B	23368530	Plug, B-B, 11P
P512	23902863	Socket, 20P
P513	23902863	Socket, 20P
P661	23363607	Jack, Headphone
⚠P801	23372014	Power Cord
PD30A	23902063	Socket, B-B, 6P
PD31A	23902852	Socket, B-B, 7P
PF01A	23367724	Plug, B-B,15P

Location No.	Part No.	Description
PF01B	23902655	Socket, B-B, 15P
PG01	23368005	Plug, B-B, 6P
PG02	23368511	Plug, B-B, 7P
PQ01A	23902655	Socket, B-B, 15P
PQ01B	23367724	Plug, B-B,15P
PR01A	23902064	Socket, B-B, 8P
PR01B	23368006	Plug, B-B, 8P
PR02A	23902064	Socket, B-B, 8P
PR02B	23368006	Plug, B-B, 8P
PU01	23902655	Socket, B-B, 15P
PU02	23902781	Socket, B-B, 12P
PV03	23365546	Jack, S-VHS, 4P
PV04	23363252	Jack, 1P Phono(Yel)
PV05	23365508	Jack, Phono, 2P
PV10B	23368520	Plug, B-B, 20P
PV11B	23368520	Plug, B-B, 20P
PX01B	23367724	Plug, B-B,15P
PX02B	23368531	Plug, B-B, 12P
PZ01A	23902213	Socket, B-B, 10P
PZ01B	23368130	Plug, B-B,10P
⚠S801	23344395	Switch, Push, 2C1P
SA01	23145430	Switch, Push, 1C1P
SA02	23145430	Switch, Push, 1C1P
SA03	23145430	Switch, Push, 1C1P
SA04	23145430	Switch, Push, 1C1P
SA06	23145430	Switch, Push, 1C1P
⚠V901A	23902891	Socket, CRT, 10P
W661	23351116	Speaker, SPK-1382, 60X120mm, 8 ohm (2896DD)
W661	23351143	Speaker, SPK-1400, 60X120mm, 8 ohm (7096DD)
W662	23351116	Speaker, SPK-1382, 60X120mm, 8 ohm (2896DD)
W661	23351143	Speaker, SPK-1400, 60X120mm, 8 ohm (7096DD)
X401	23153721	Ceramic Resonator, 503kHz, TCR1023
X501	23153961	Crystal, 3.58MHz
X503	23153979	Crystal, 4.43MHz
XA01	23153325	Ceramic Resonator, 8.00MHz, TCR1056
XF01	23153421	Crystal, 20.48MHz
Z201	23107519	Ceramic Video Trap, 4.43MHz, TCF1066
Z420	23144539	Protector, PRF20005491, 125V, 2A
⚠Z430	23144536	Protector, PRF10005491, 125V, 1A
Z801	23904998	IC, HIC1016
⚠Z889	23144543	Protector, PRF50005491, 125V, 5A
⚠Z890	23144543	Protector, PRF50005491, 125V, 5A
⚠Z891	23144543	Protector, PRF50005491, 125V, 5A
⚠Z896	23144539	Protector, PRF20005491, 125V, 2A
⚠Z897	23144539	Protector, PRF20005491, 125V, 2A
ZT01	23153736	Ceramic Resonator, TCR1025
ZX101	23103823	Filter, TEM2027D
ZX102	23103823	Filter, TEM2027D
ZX103	23103823	Filter, TEM2027D
ZX104	23103823	Filter, TEM2027D

Location No.	Part No.	Description
ZX201	23103823	Filter, TEM2027D
ZX202	23103823	Filter, TEM2027D
ZX203	23103823	Filter, TEM2027D
ZX801	23303181	Filter, TEM1012N
ZX802	23303181	Filter, TEM1012N
PC BOARD ASSEMBLIES		
＊U902A	23783976	Signal Board, 7208D-1
＊U902B	23783977	A-PRO Board, PB7208-2 A-P
＊U903A	23784569	Power Board, PB7209A-1
＊U903B	23784570	DEF Board, PB7209A-2
＊U904	23706629	BACK-T Board, PB7211Y
＊U905	23784571	CRT Drive/DSM Board, PB7212A
＊U906A	23783978	SECAM+1HDL Board, PB7213A-1
＊U906B	23783979	COMB Board, PB7213A-2
＊U906C	23783980	YUV SW Board, PB7213A-3
＊U906D	23783981	PAL 100HZ Board, PB7213A-4
＊U907	23706855	TEXT Board, PB6513Y
＊U908A	23706825	UP CONVER Board, PB7366X
PICTURE TUBE		
⚠V901	23312858	Picture Tube, A66EAK071X54
TUNER		
H001	23321278	Tuner, EGA12LX3
ACCESSORIES		
K902	23306175	Remote Hand Unit, CT-9867
AT04	23305572	Battery Cover
Y103	23563771	Owner's Manual, German, 2896DD/7096DD
Y104	23563772	Owner's Manual, Itarian, 2896DD/7096DD
CABINET PARTS		
A201S	23510020	Front Cover (2896DD)
A201S	23549819	Front Cover (7096DD)
A214	23035412	Screw, BTB4X12SZN
A231	23444902	Button, Power
A233	23430336	Lens (Remote)
A235	23432920	Mark
A236	23519547	Speaker Grille (2896DD)
A236	23527111	Speaker Grille (7096DD)
A237	23443966	Button Control
A241	70368125	Push Catch for Door
A242	23426957	Door
A243	23421759	Piece (Decorative)
⚠A401	23426393	Back Cover
A411	23550788	Label, Model No. 2896DD
A411	23564219	Label, Model No. 7096DD
A701	23524766	Case
A702	23935374	Packing, Bottom
A703	23935375	Packing, Top

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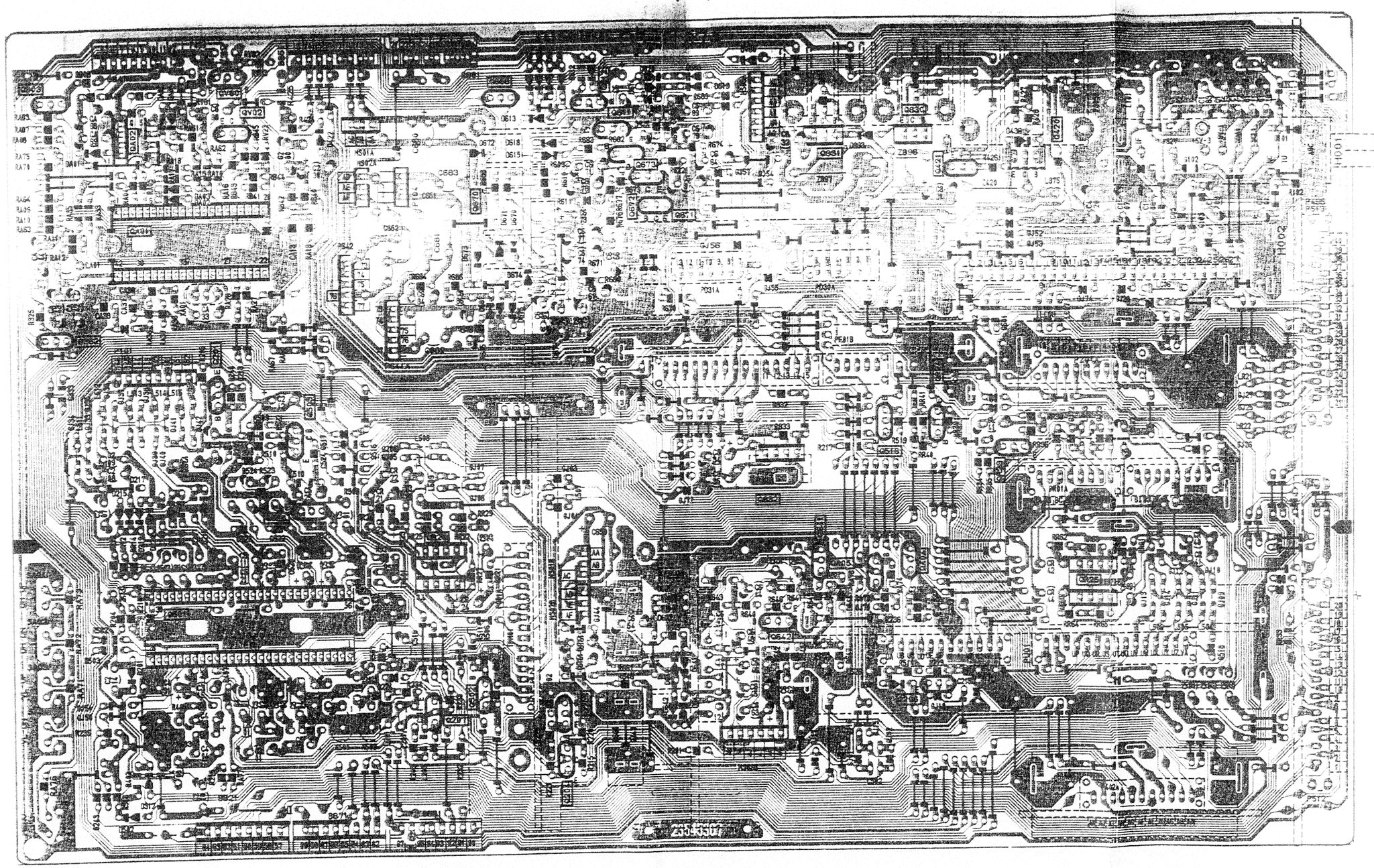
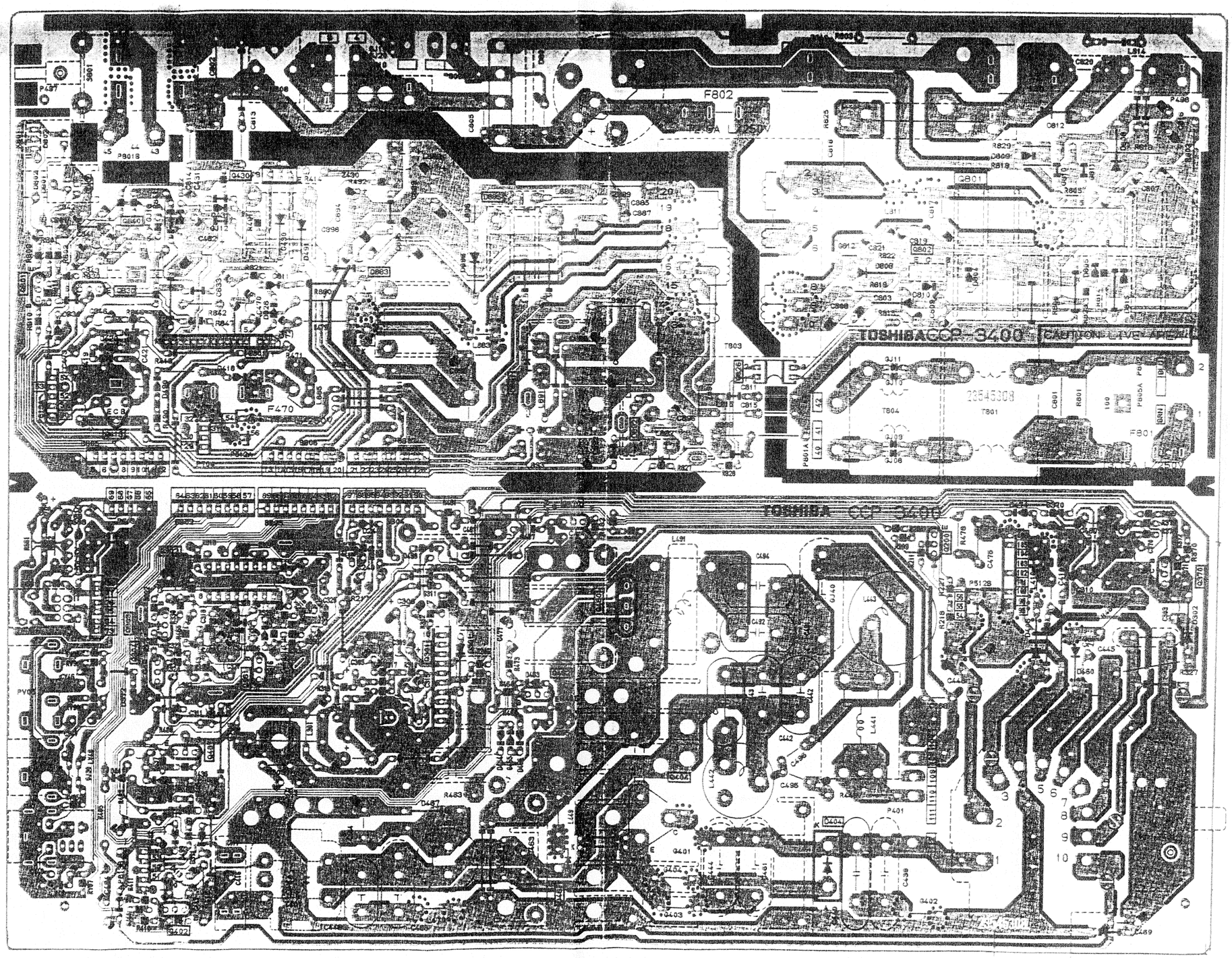
SIGNAL BOARD PB7208D-1

BOTTOM (FOIL) SIDE



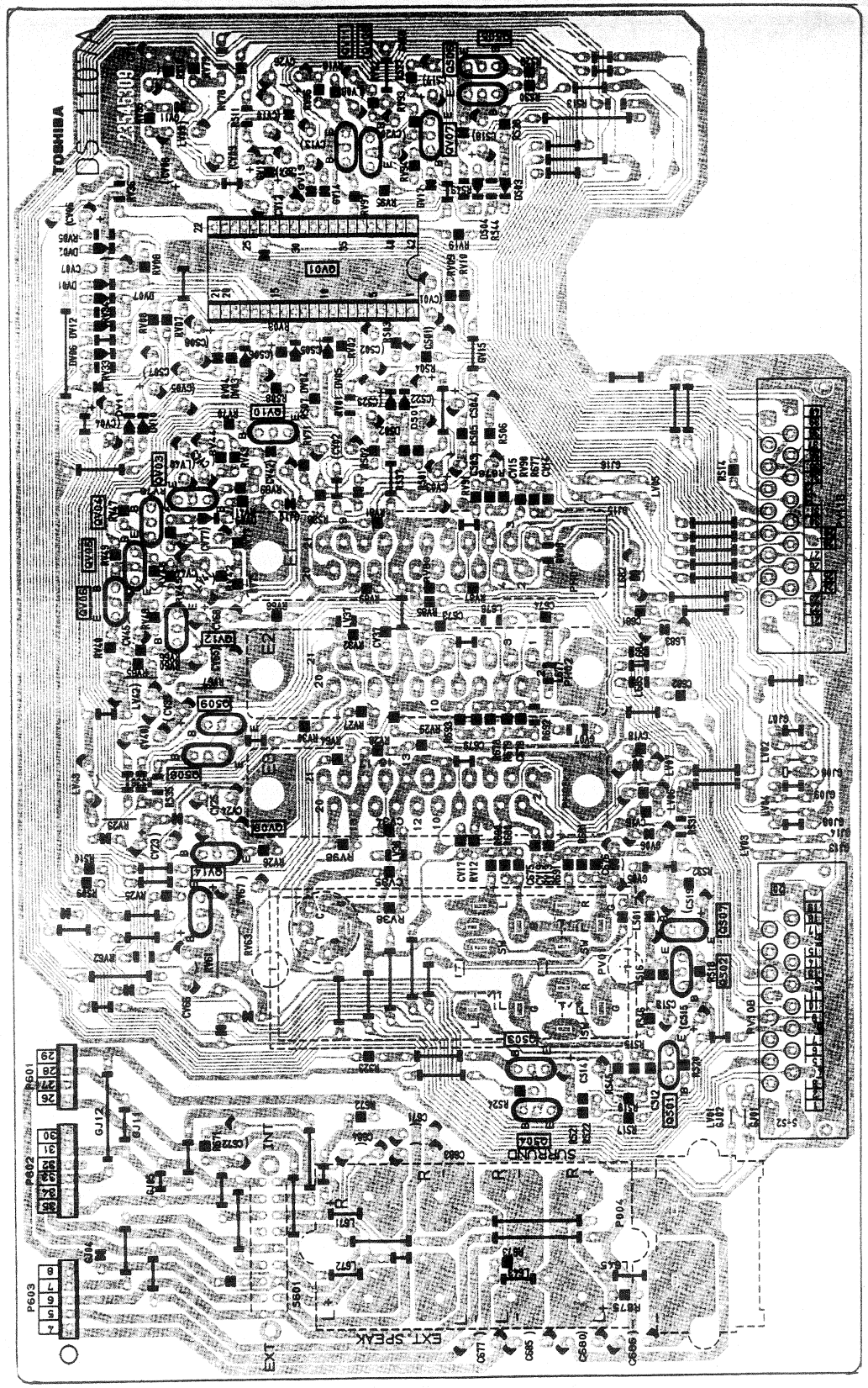
POWER BOARD PB7209X-1/DEF BOARD PB7209A-2

BOTTOM (FOIL) SIDE



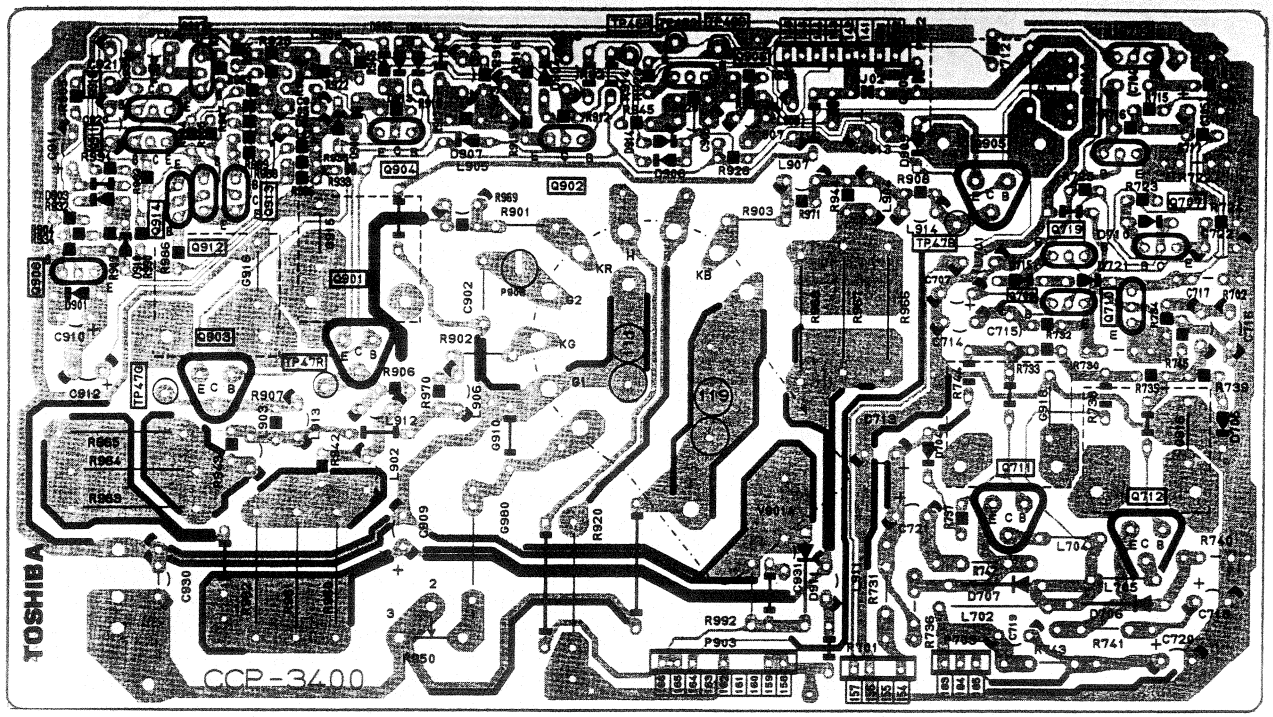
BACK TERMINAL/AV BOARD PB7211Y

BOTTOM (FOIL) SIDE



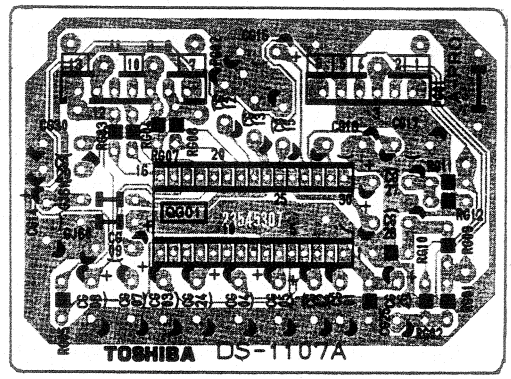
CRT DRIVE/DSM BOARD PB7212A

BOTTOM (FOIL) SIDE



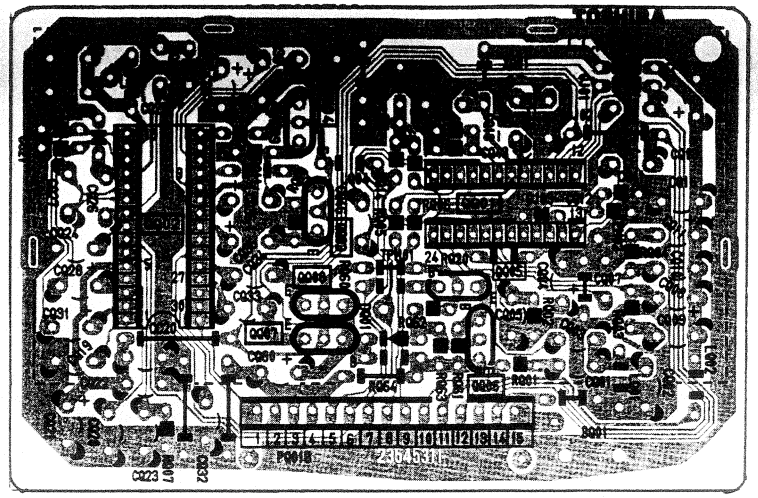
A-PRO BOARD PB7208D-2

BOTTOM (FOIL) SIDE



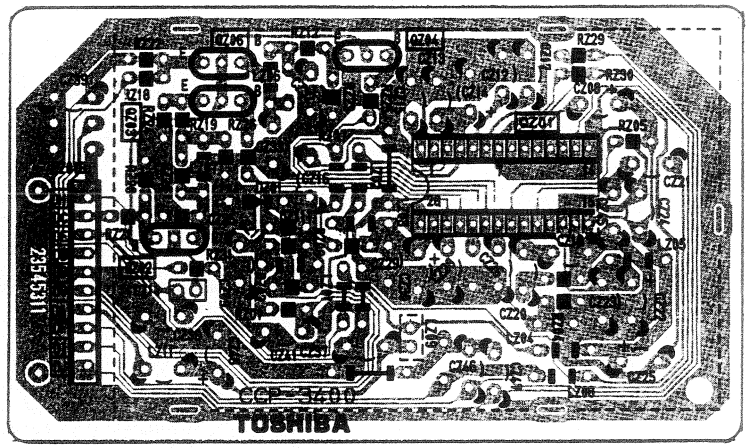
SECAM BOARD PB7213A-1

BOTTOM (FOIL) SIDE



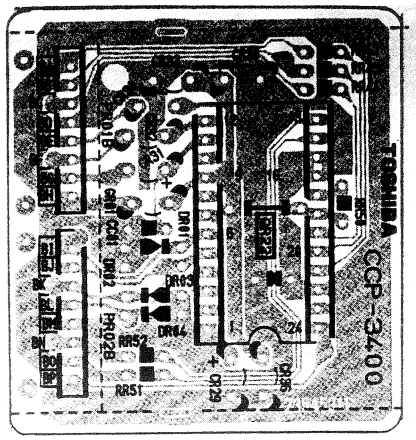
COMB BOARD PB7213A-2

BOTTOM (FOIL) SIDE



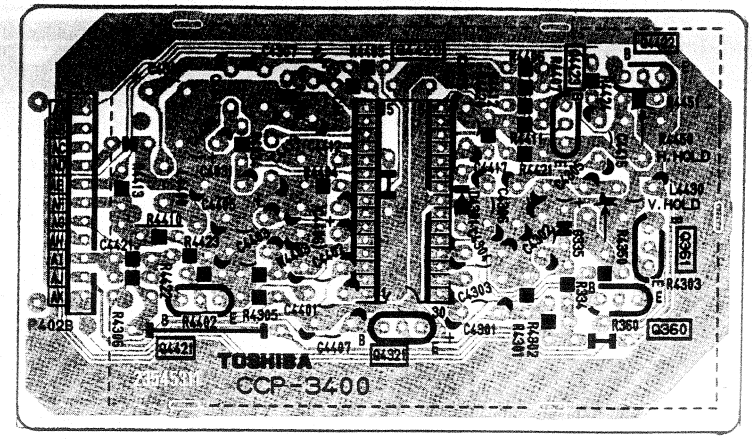
YUV S/W BOARD PB7213A-3

BOTTOM (FOIL) SIDE



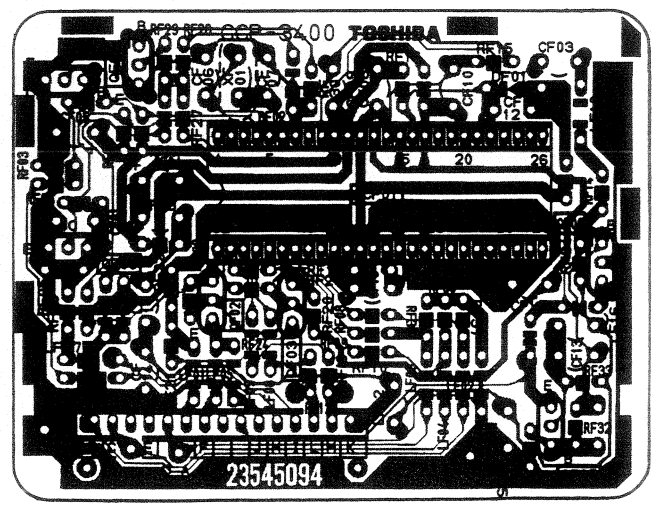
PAL/100Hz BOARD PB7213A-4

BOTTOM (FOIL) SIDE



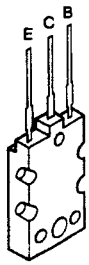
TEXT BOARD PB6513Y

BOTTOM (FOIL) SIDE

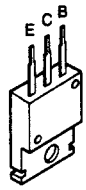


TERMINAL VIEW OF TRANSISTORS

① 2SD2253
(old)
2SC5243



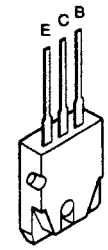
② 2SC3852
2SD1763A
2SC1569
2SC4544
2SA1788
2SA1306
2SA1186A



③ 2SC752GTM
2SC2482
2SC2655
2SC4721P

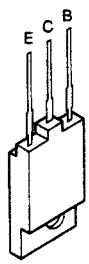
④ 2SC752
2SA562TM
2SA1015
2SC1815
2SC2878
2SC1740S
2SC2120
2SA9335

⑤ 2SA1788

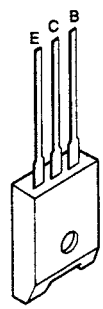


⑥ RN2203
RN2201
RN2004
RN1203
RN1204
RN2204
RN1205
RN1202
RN1201

⑦ 2SD1554
2SD2253
2SD1556
2SC5143
2SD2553



⑧ ON4409



SPECIFIC INFORMATIONS

U904 BACK-T AV BOARD
2896DD PB7211Y

M106

AUDIO OUT (FIX)

S-VIDEO

E3

E2

E1

SCART1 #8

SCART2 #8

2.0Vp-p

1.2Vp-p

E

F

G

H

I

J

K

L

1 2 3 4 5 6 7 8 9

E3

E2

E1

: No.1197

M106

TO SIGNAL

TO SIGNAL

CENTER SP
GND
SURR SP
GND
L-IN
L-IN
GND-L
GND-R
R-IN
R-IN

GND NO. FOR AUDIO

M601

R-SP

L-SP

HOT USE

SURROUND-SP

CENTER SP

1.2Vp-p

1.2Vp-p

21PIN S/B PLUG

S S2
GND
C TRAP
C S2
GND
L S2
R S2
GND
GND
21 PIN Yo
21 PIN R
21 PIN G
21 PIN B
NC
AV-C
SDA
SCL
AV-Y
GND

PY11B
20P S/B PLUG

GND
AV-V
C-COMB
GND-Y
Y-COMB
GND
TV-V
TV-R
TV-L
+9V-1
AV-L
AV-R
SYNC-AV1
A-MUTE
SDA
SCL
E3 DET

TO SIGNAL

AV-L
AV-R
GND
AV-Y
GND AV
V-AV
GND
R OUT
L OUT

104Vp-p

102Vp-p

103Vp-p

U905 CRT-D/DSM BOARD
2896DD PB7212Y

M902
To SIGNAL

M701
To DEF/PWR

M903
To DEF/PWR

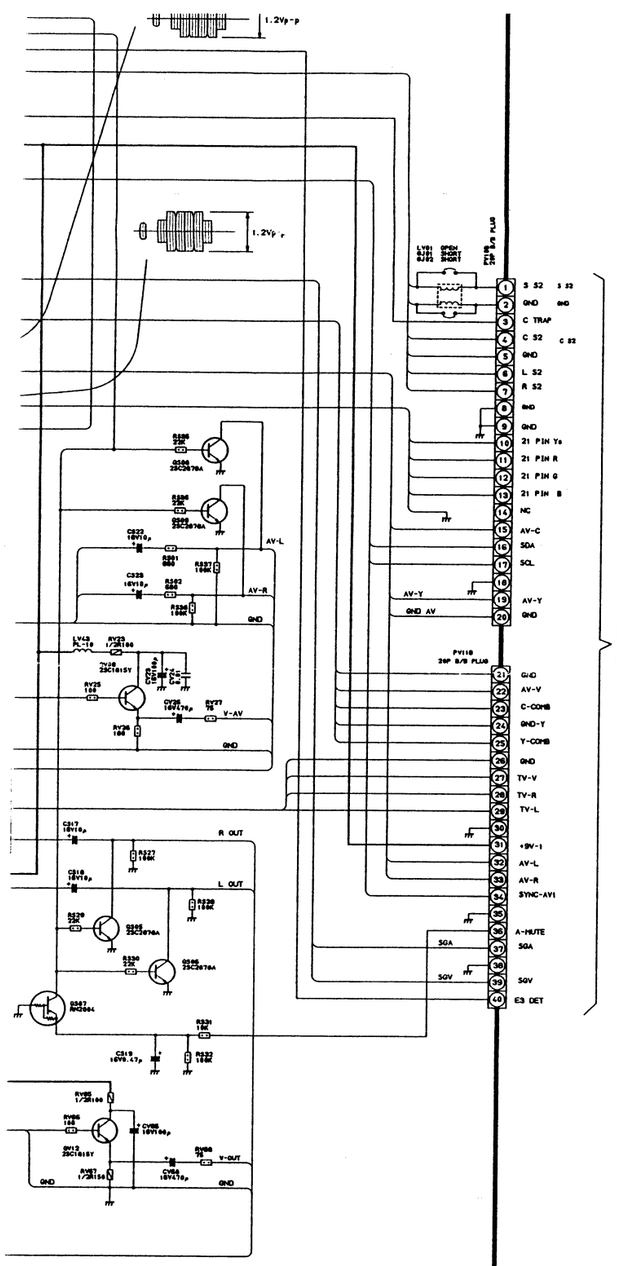
RED CUT OFF
GREEN CUT OFF
BLUE CUT OFF
GREEN DRIVE
BLUE DRIVE

(HEATER)

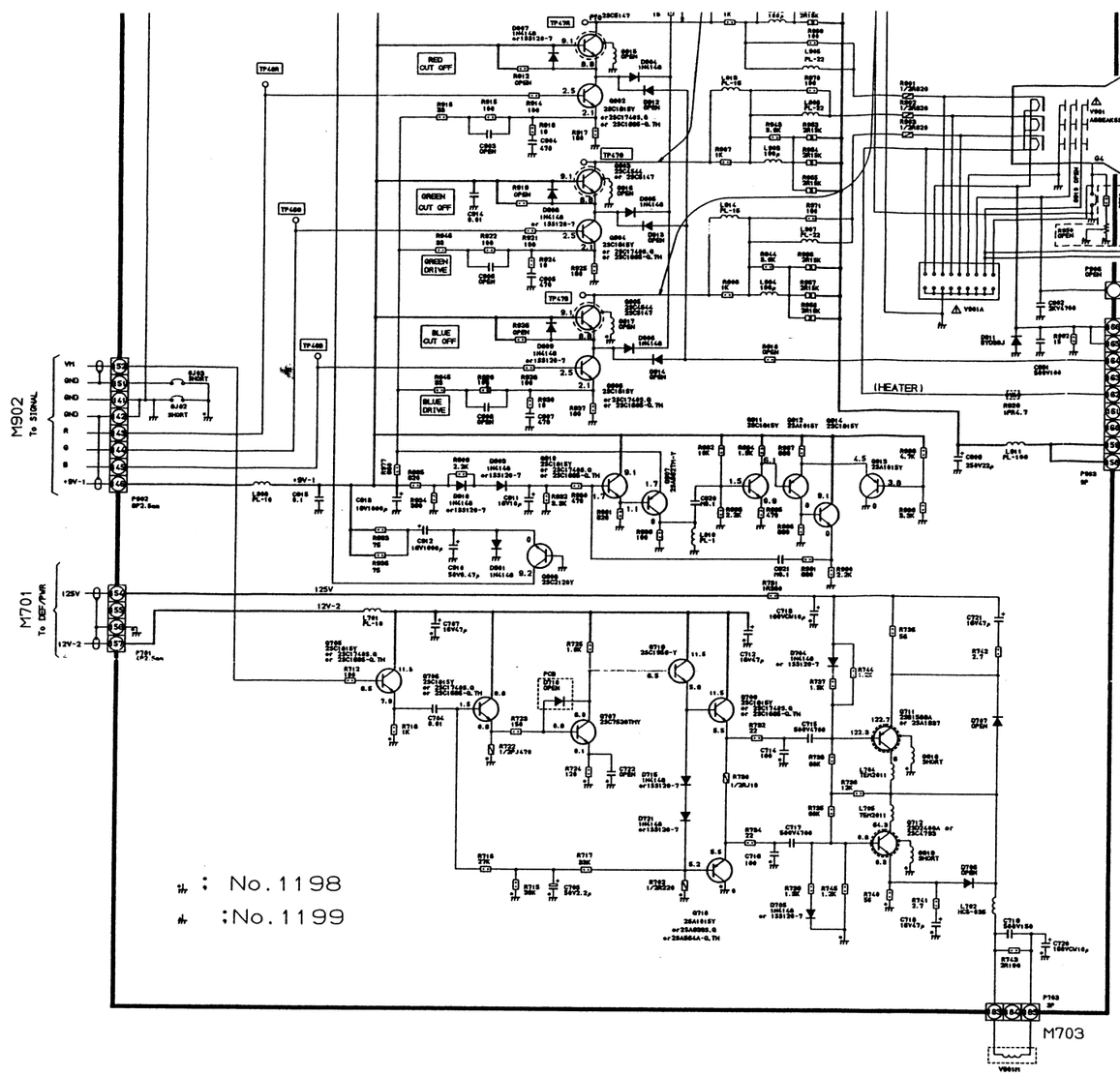
FOR 32DV

ES
GND
BLK
NC
Heater
NC
NC
200V
200V

: No.1198
: No.1199



※ : No.1197



※ : No.1198

※ : No.1199

NOTE
The marking OPEN means that a component is not fitted although there is an ident for it on the PCB.

BACK-T/CRT-D
2896DD
7096DD 4/4

PK3122

REPLACEMENT PARTS LIST DIFFERENCES

Location No.	Part No.	Description
A411	23550788	Label, Model No.
CQ20	24567104	PF, 0.1μF
CQ23	24567104	PF, 0.1μF
CQ24	24567104	PF, 0.1μF
CQ26	24567104	PF, 0.1μF
CQ27	24567104	PF, 0.1μF
CQ33	24567104	PF, 0.1μF
CQ34	24567104	PF, 0.1μF
CQ60	24797229	EL, 2.2μF, ±20%, 50V
CZ20	24590103	PF, 0.01μF
DQ01	23115599	Diode, 1N4148
Q4423	23114577	Transistor, 2SC22350(FA-1)
QA01	23000177	IC, TMP87CS38N-1C14
QQ05	23314794	Transistor, 2PC1815Y
QQ06	23114461	Transistor, RN1203
QQ07	23314794	Transistor, 2PC1815Y
QQ08	23314794	Transistor, 2PC1815Y
R630	24366512	CF, 5100 ohm
R631	24366512	CF, 5100 ohm
RQ60	24366101	CF, 100 ohm
RQ61	24366103	CF, 10k ohm
RQ62	24366103	CF, 10k ohm
RQ63	24366103	CF, 10k ohm
RQ64	24366104	CF, 100k ohm
U902A	23783976	Signal Board, PB7208D-1
U902B	23783977	A-PRO Board, PB7208D-2
U906A	23783978	SECAM Board, PB7213A-1
U906B	23783979	Comb Board, PB7213A-2
U906C	23783980	YUV SW Board, PB7213A-3
U906D	23783981	E/W Board, PB7213A-4
Y103	23563771	Owner's Manual, German, 2896DD
Y104	23563772	Owner's Manual, Italian, 2896DD

TOSHIBA CORPORATION

1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105-8001, JAPAN

SPECIFICATIONS (Representative: 2896DD)

Input Power Rating: 145.0 Watts (Normal), AC 220 ~ 240 Volts, 50 Hz

Aerial Input Impedance: 75 ohm unbalanced type for VHF, UHF and CATV

Receiving Channels:

System		VHF	UHF	CATV	
PAL B/G	CCIR	2 ~ 12	21 ~ 69	S1 ~ S41	X ~ Z + 2,
PAL D/K	CHINA	1 ~ 12	13 ~ 57	Z-1 ~ Z-35	

PAL, SECAM 50 Hz/60 Hz (For Video Disk playback)
4.43 NTSC (For VCR playback), 3.58 NTSC (For VCR playback)

Intermediate Frequencies:
Picture I-F carrier frequency ..... 38.9 MHz (L VL)
Sound I-F carrier frequency
L System ..... 32.4 MHz (L VH, U)/40.97 MHz (L VL)
B/G System ..... 33.4 MHz
D/K System ..... 32.4 MHz

Picture Tube: 28 inches, 660 mm (measured on diagonal of viewable picture area)
110° deflection

Sound Output: 10 W + 10W (at 10% Distortion, Main)

Speakers: 60 mm x 120 mm oval, 2 pcs (Main)

Aux. Terminals: 21 pin socket (FULL), 21 pin socket (S-VIDEO/AV), MONITOR OUTPUT, STEREO HEADPHONE JACK (3.5mm).

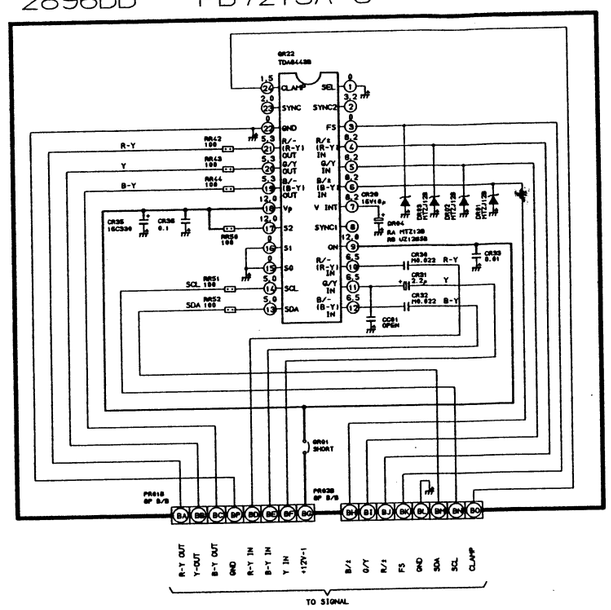
Cabinet: Table type

Dimensions:
Height ..... 569 mm
Width ..... 760 mm
Depth ..... 480 mm

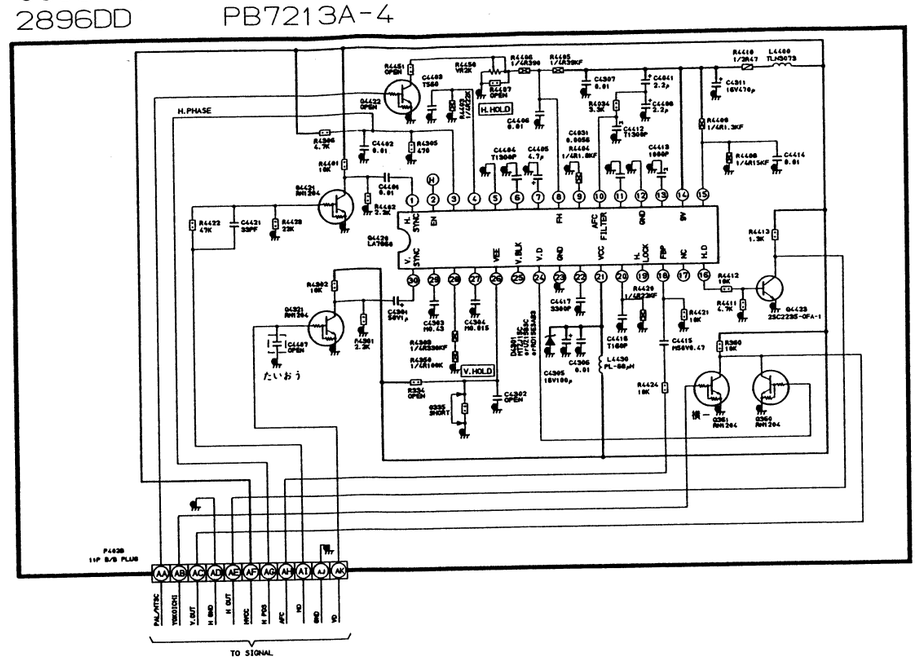
Mass: 35.0 kg

Please refer to owner's manual in detail.

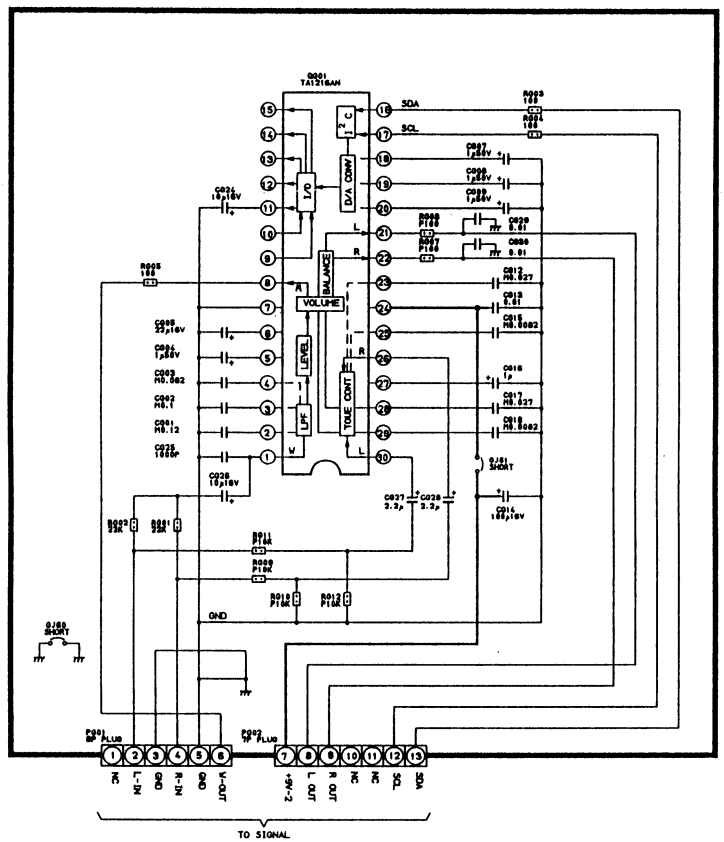
U906C YUV SW BOARD
2896DD PB7213A-3



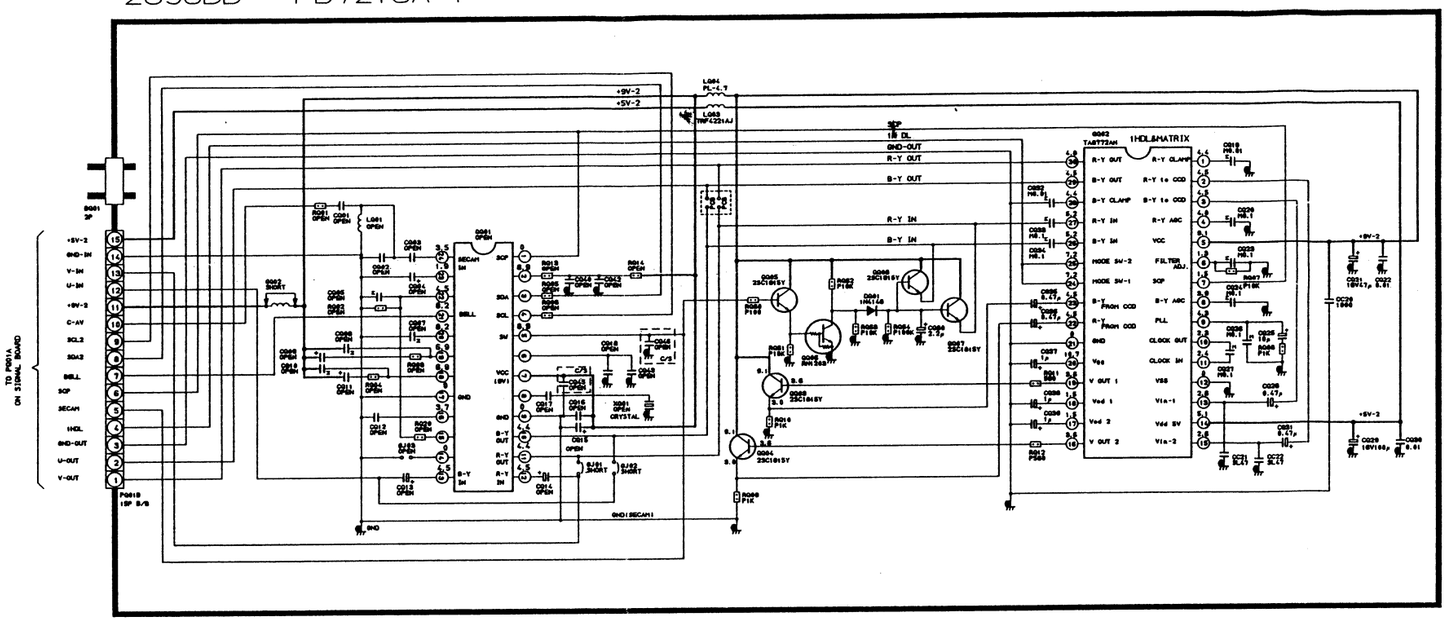
U906D PAL 100HZ BOARD
2896DD PB7213A-4



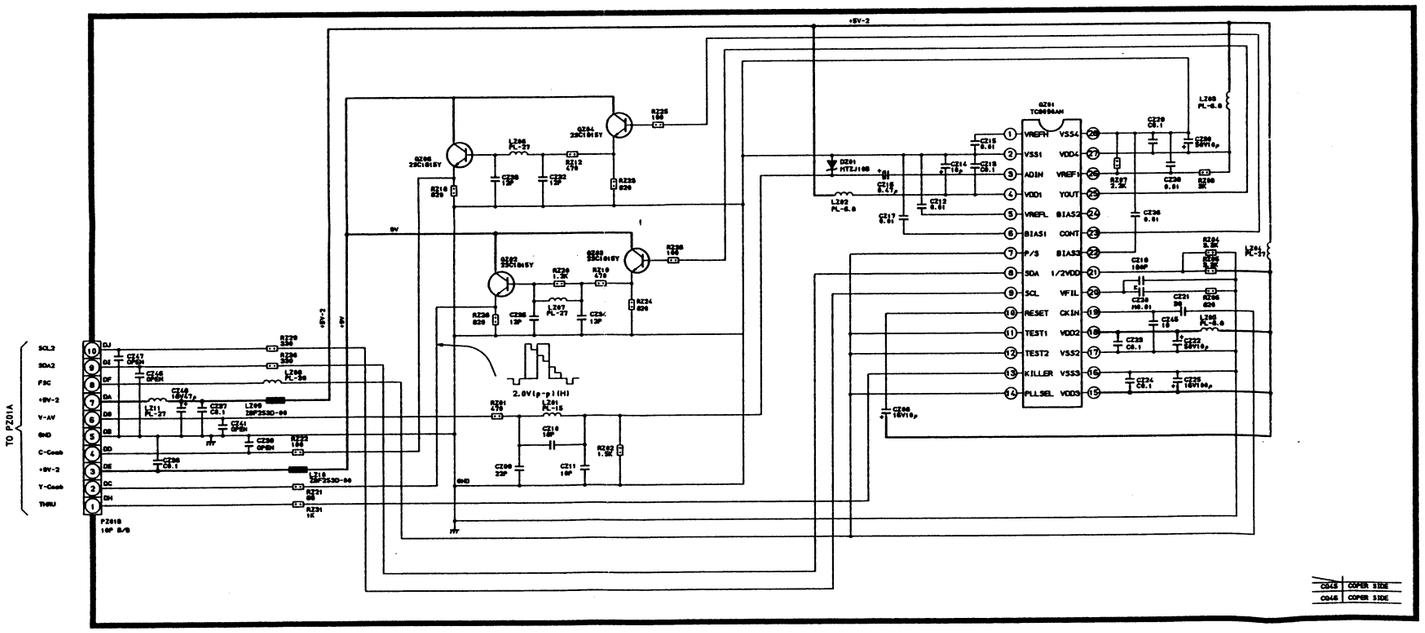
U902B A PRO/WOOFER BOARD
2896DD PB7208D-2 A-PRO



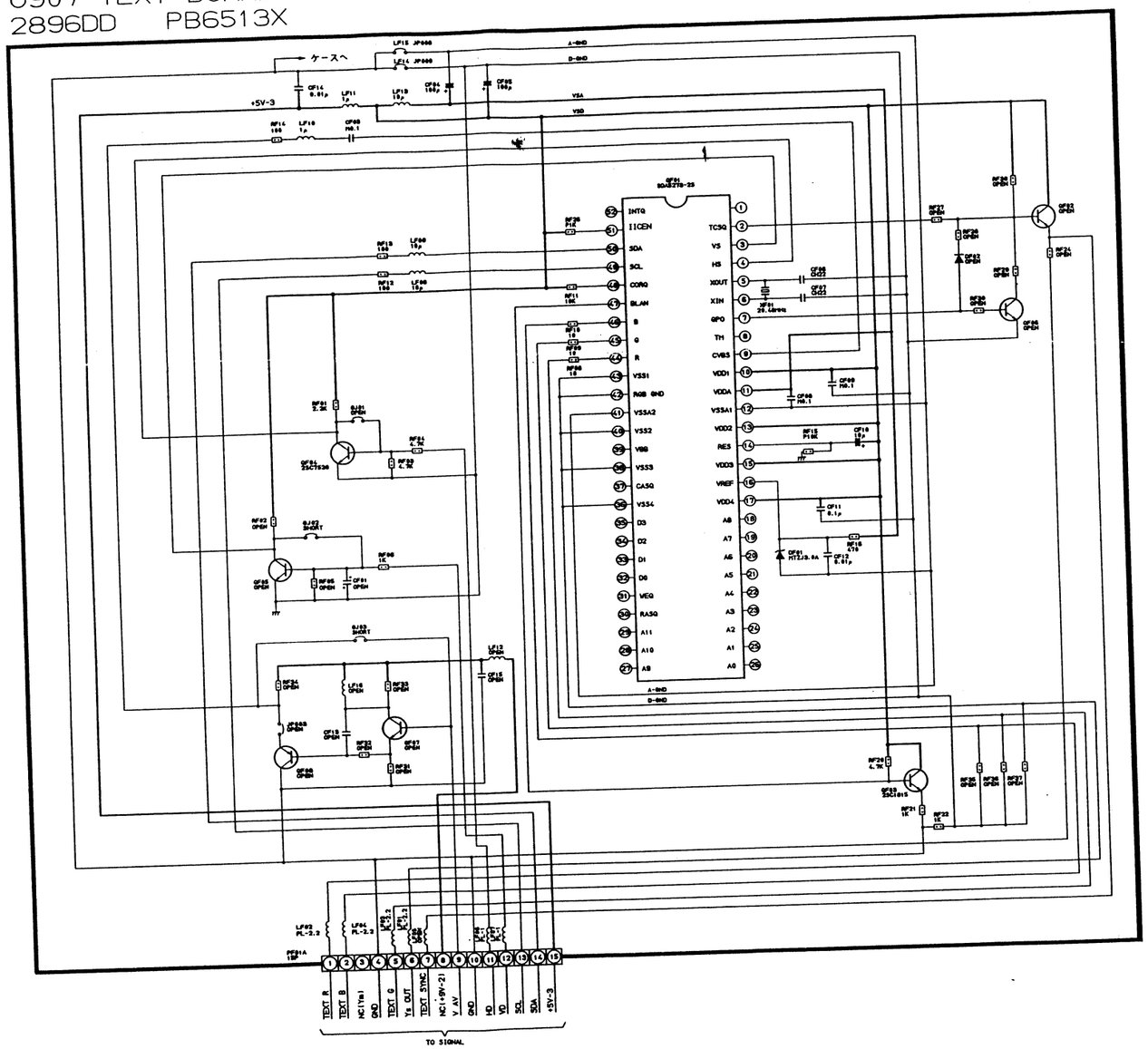
U906A SECAM+1HDL BOARD
2896DD PB7213A-1



U906B COMB BOARD
2896DD PB7213A-2



U907 TEXT BOARD
2896DD PB6513X



TEXT/PRO-WOOFER/
SECAM/COMB/YUV-SW/
PAL-100Hz

2896DD
7096DD 3/4

PK3H21

NOTE
The marking OPEN means that a component is not fitted although there is an ident for it on the PCB.

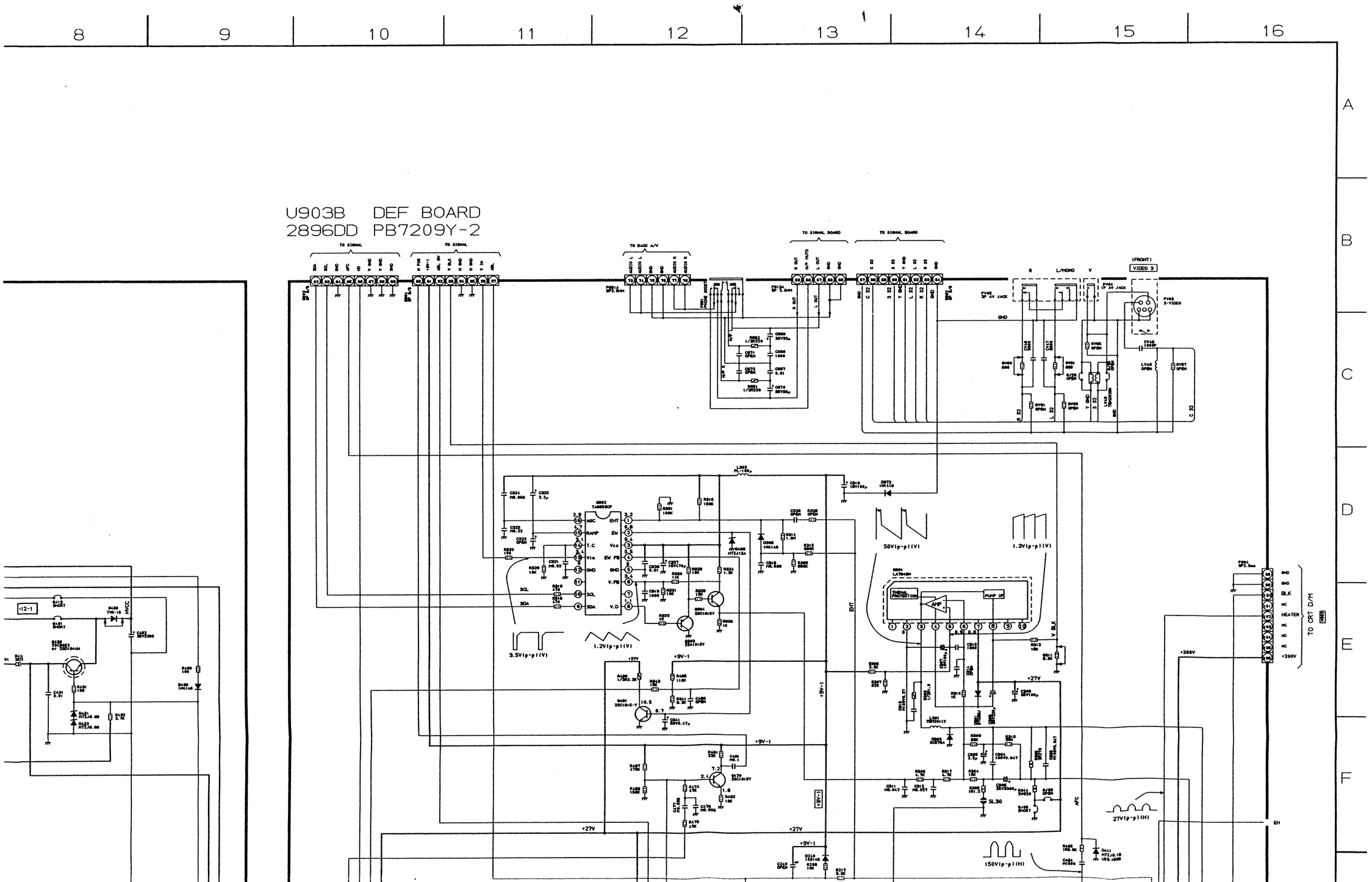
NOTES:

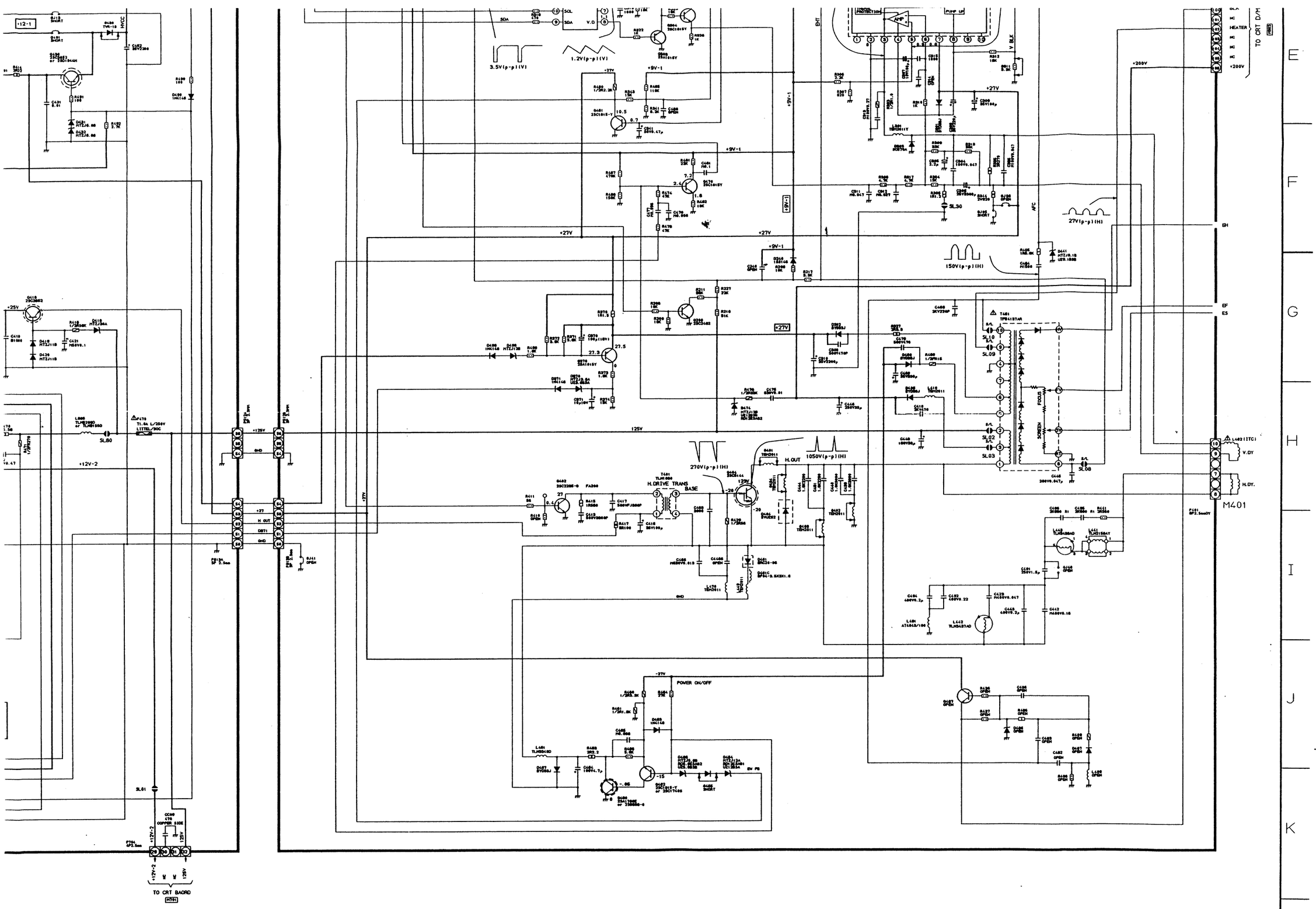
1. D.C. resistance value of a principal transformer is shown in this schematic diagram. These are measured for separated from the circuit.
2. The circuits are subject to change without notice.
3. ⬬ : Solder links.

EXPRESSION

VALUE OF RESISTOR, CAPACITOR and INDUCTOR

1. Resistance is shown in ohm, k=1,000, M=1,000,000
2. Unless other wise noted in schematic, all capacitor values less than 1 are expressed in μF and the values more than 1 in pF.
3. Unless otherwise noted in schematic, all inductor values more than 1 are expressed in μH, and the values less than 1 in H.





NOTE
The marking OPEN means that a component is not fitted although there is an ident for it on the PCB.

POWER/DEFLECTION
2896DD
7096DD 2/4

PK3120

SCHEMATIC DIAGRAM MODEL : 2896DD / 7096DD (2/4)

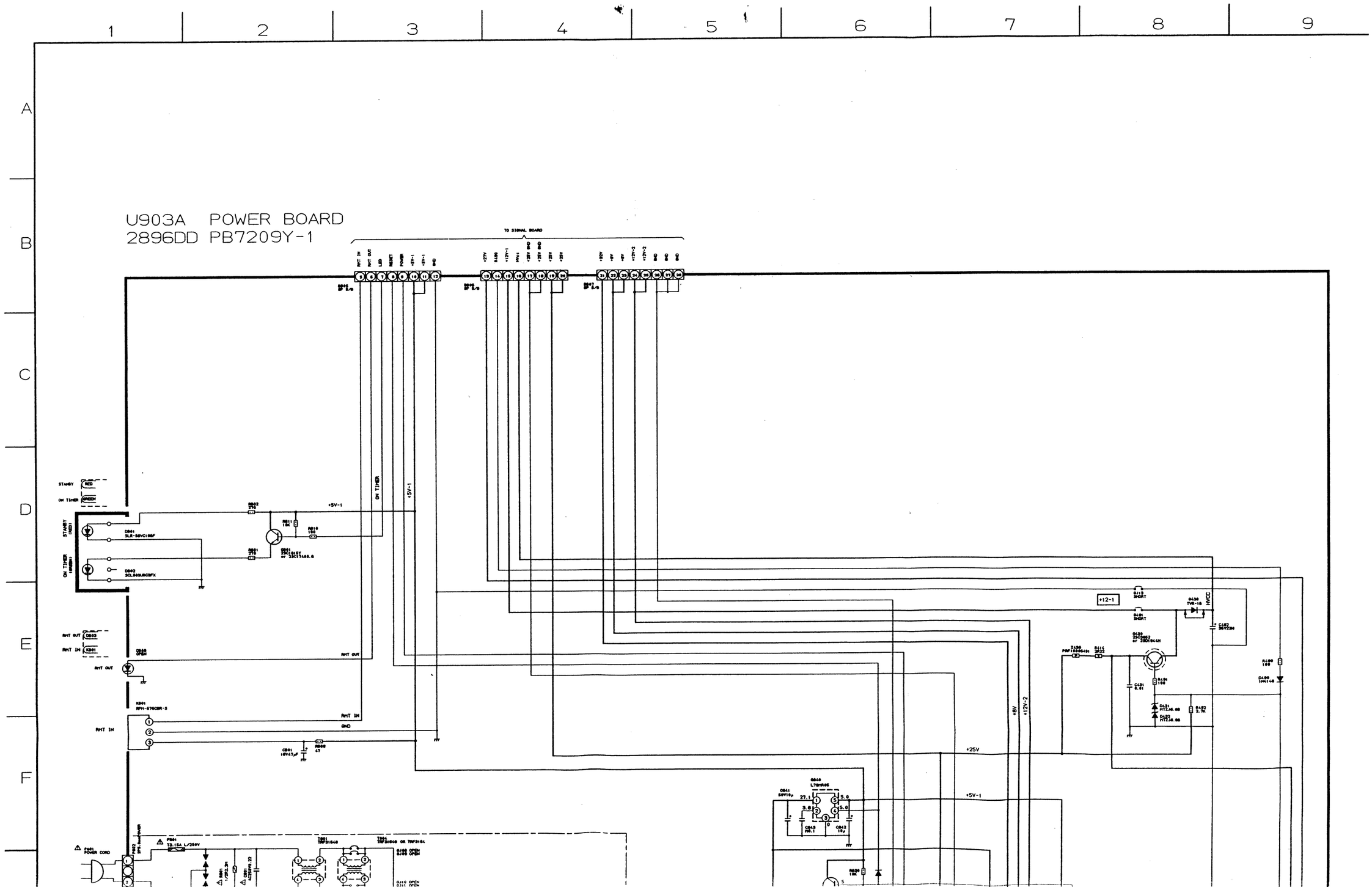
CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

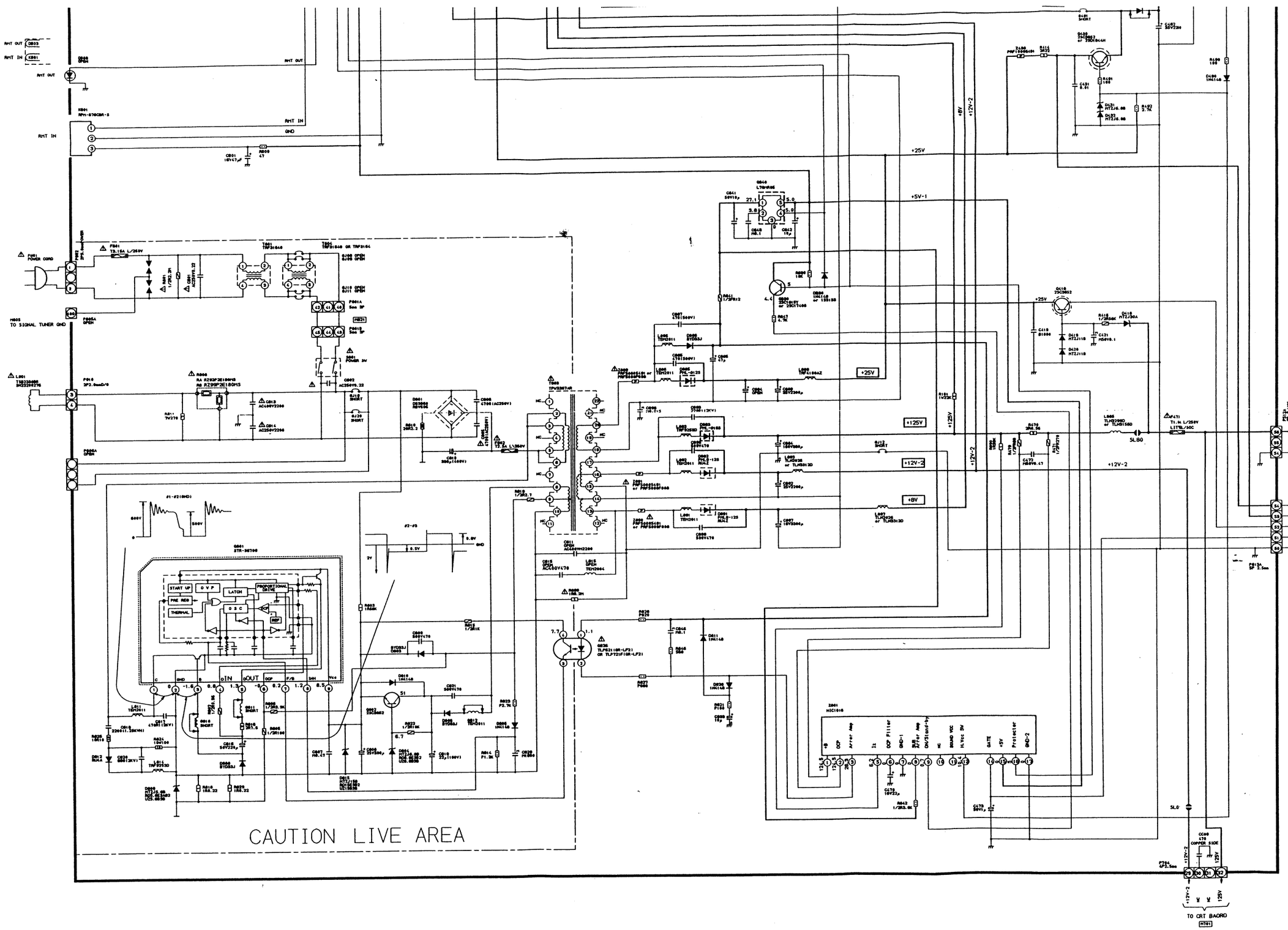
OBSERVATION OF VOLTAGES AND WAVEFORMS

1. Voltages read with VTVM from point shown to chassis ground, line voltage 220 volts, colour bar signal. Voltages reading may vary ±20%.
2. All waveforms are taken using a wide band oscilloscope and a low capacity probe.
3. Waveforms are taken using a standard colour bar signal.
4. Make sure that CONTRAST and COLOUR controls are in mid position and BRIGHTNESS control is almost in maximum position. Set other controls for best picture.

NOTES:

1. D.C. resistance value of a principal transform gram. These are measured for separated from
2. The circuits are subject to change without not
3. ● : Solder links.




CAUTION LIVE AREA
TO CRT BAORD
CN701
+25V
+5V-1
+8V
+12V-2
+125V
-12V-2
-125V
GND
H OUT
D571
SL0
SL80
START UP
O V P
LATCH
PROPORTIONAL DRIVE
PWC REG
O S C
REF
THERMAL
oIN
oOUT
OCP
F/B
SYNC
Vcc
GND
POWER CORD
TO SIGNAL TUNER GND
RMT OUT
RMT IN
GND
POWER SW
SHORT
OPEN
PROTECTOR
Error Amp
OCP Filter
OCP
GND-1
S/S Error Amp
ON/Stand-by
NC
SOUND VCC
H.Vcc 25V
GATE
+5V
GND-2

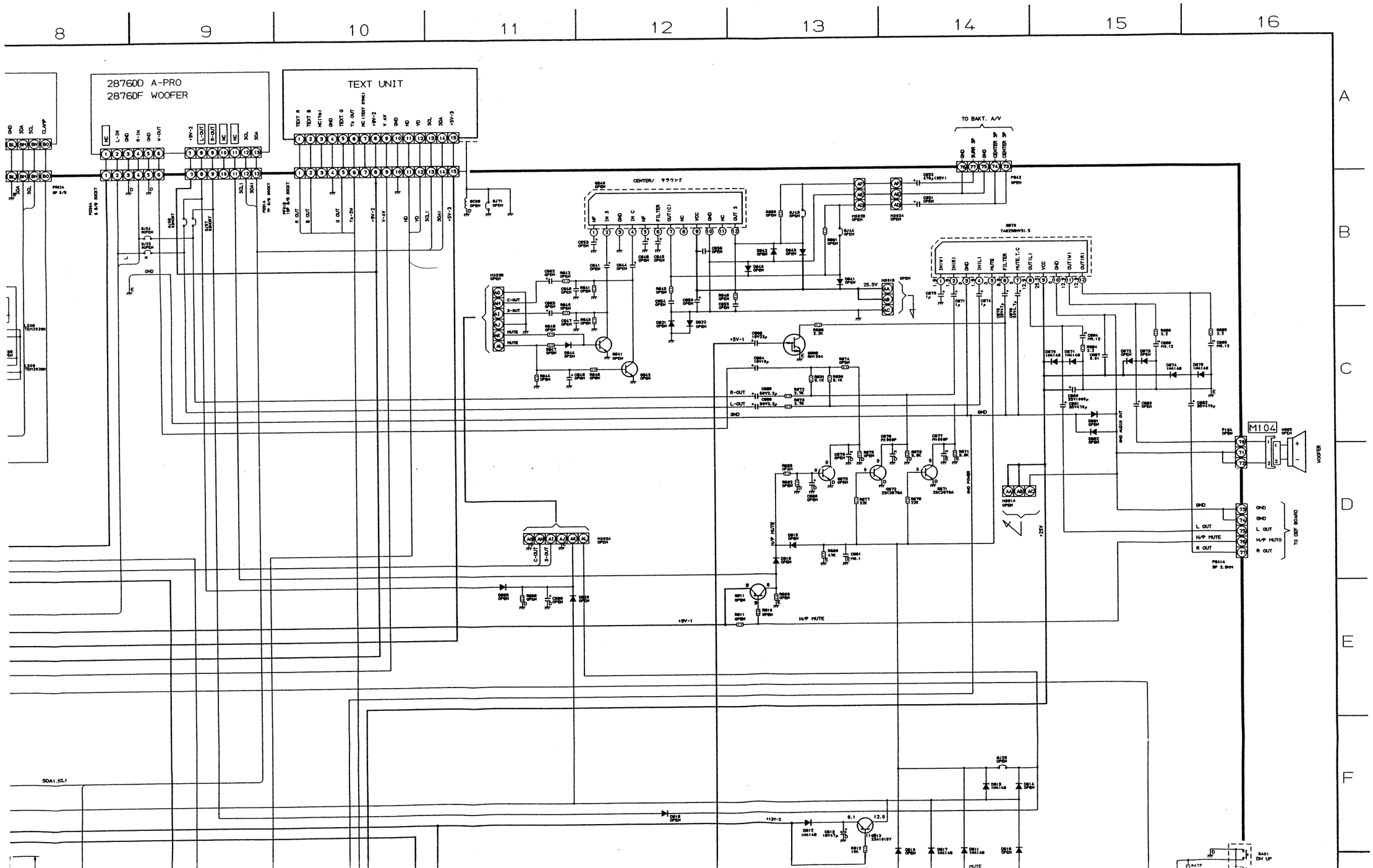
EXPRESSION

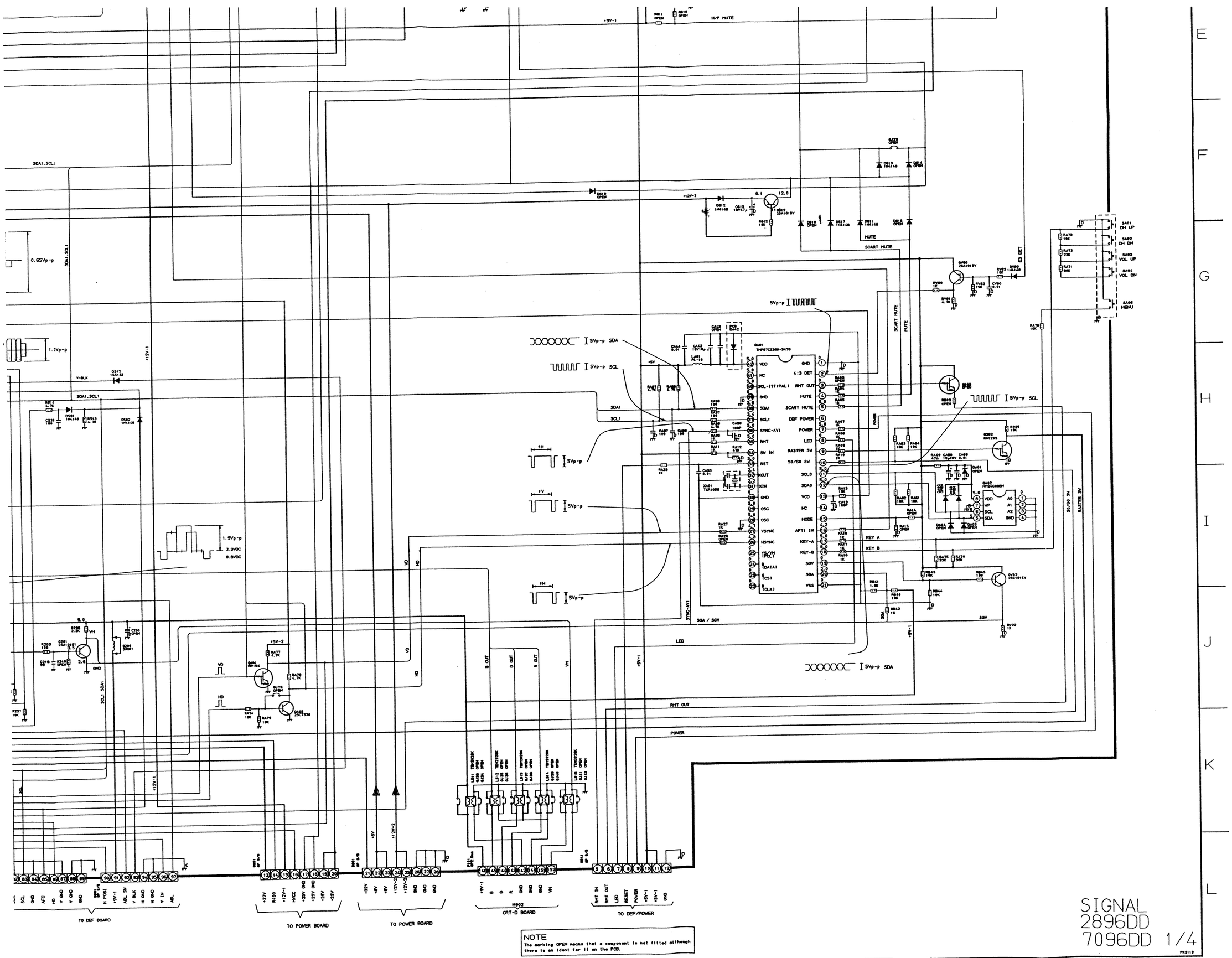
VALUE OF RESISTOR, CAPACITOR and INDUCTOR

1. Resistance is shown in ohm, k=1,000, M=1,000,000
2. Unless other wise noted in schematic, all capacitor values less than 1 are expressed in μF and the values more than 1 in pF.
3. Unless otherwise noted in schematic, all inductor values more than 1 are expressed in μH, and the values less than 1 in H.

NOTES:

1. D.C. resistance value of a principal transformer is shown in this schematic diagram. These are measured for separated from the circuit.
2. The circuits are subject to change without notice.
3. ⬬ : Solder links.




SDA1, SCL1
0.65Vp-p
1.2Vp-p
1.9Vp-p
2.3VDC
0.8VDC
5Vp-p SDA
5Vp-p SCL
fH
fV
+5V-1
+12V-1
+12V-2
+5V-2
+8V
MUTE
SCART MUTE
RMT OUT
POWER
LED
KEY A
KEY B
SGA / SGV
SGV
TO DEF BOARD
TO POWER BOARD
TO POWER BOARD
CRT-D BOARD
TO DEF/POWER
NOTE
The marking OPEN means that a component is not fitted although there is an ident for it on the PCB.
SIGNAL
2896DD
7096DD 1/4
PK3119

SCHEMATIC DIAGRAM MODEL : 2896DD / 7096DD (1/4)

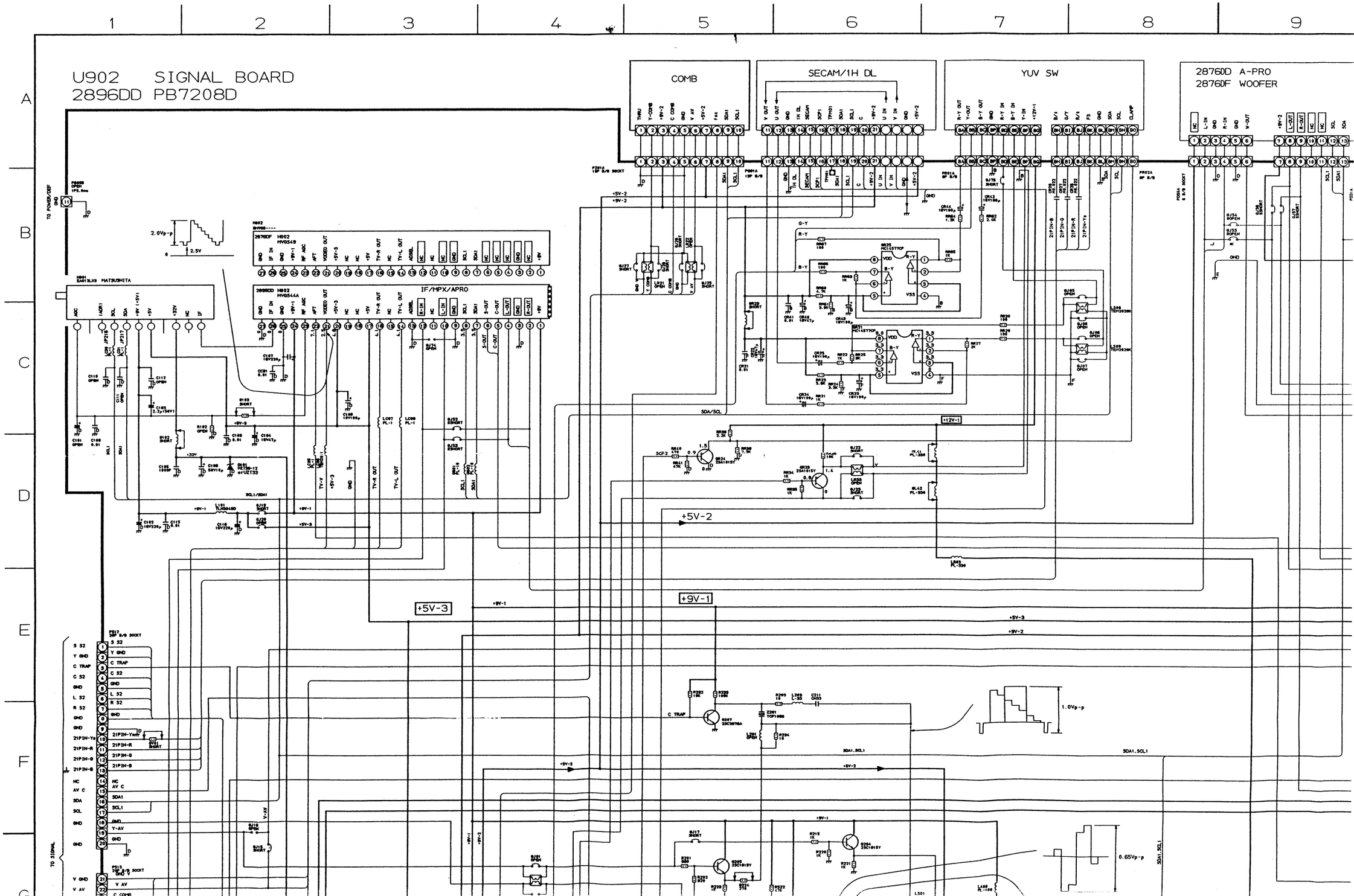
CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 3. Do not degrade the safety of the receiver through improper servicing.

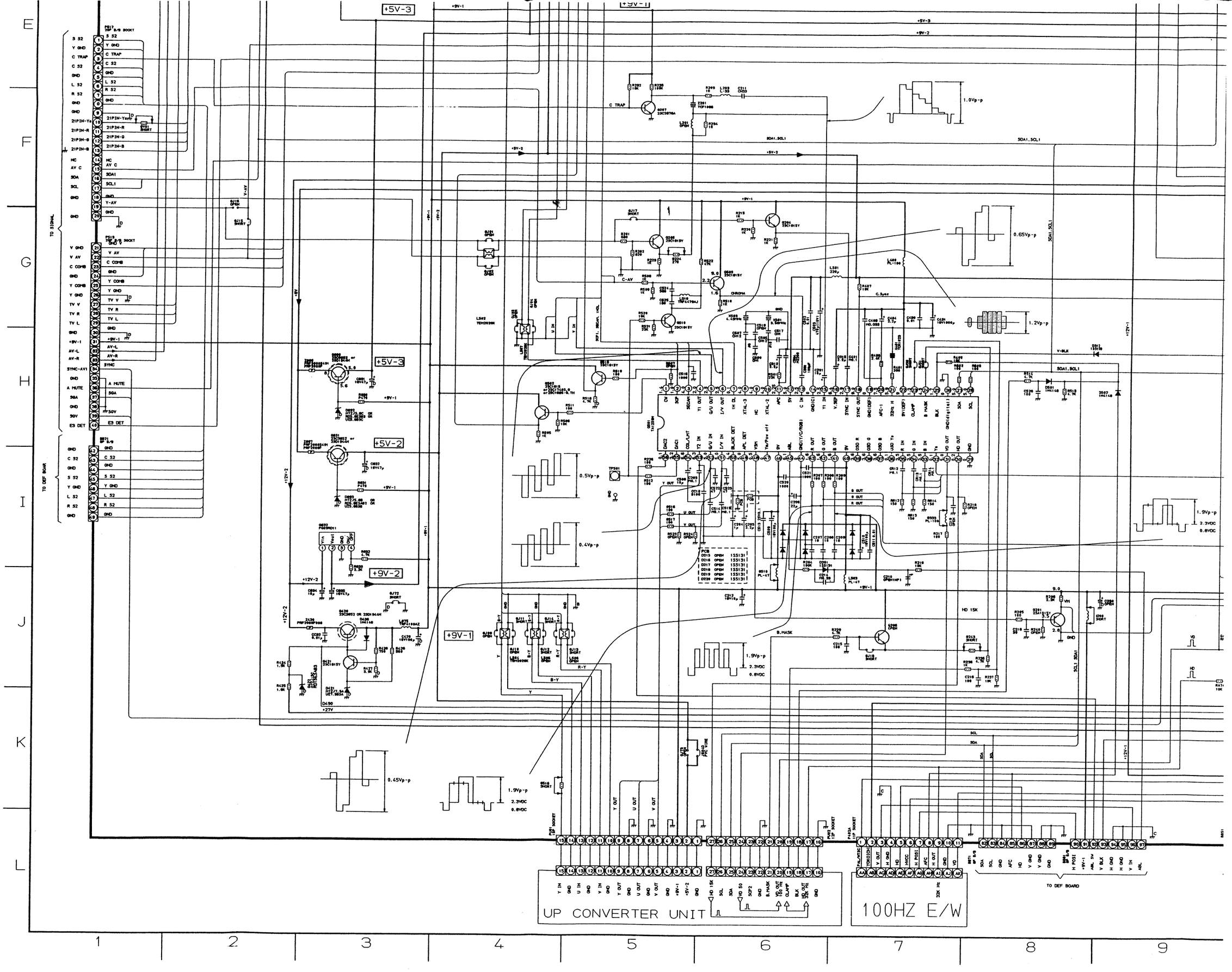
OBSERVATION OF VOLTAGES AND WAVEFORMS

1. Voltages read with VTVM from point shown to chassis ground, line voltage 220 volts, colour bar signal. Voltages reading may vary ±20%.
2. All waveforms are taken using a wide band oscilloscope and a low capacity probe.
3. Waveforms are taken using a standard colour bar signal.
4. Make sure that CONTRAST and COLOUR controls are in mid position and BRIGHTNESS control is almost in maximum position. Set other controls for best picture.

NOTES:

1. D.C. resistance value of a principal transfor
gram. These are measured for separated from
2. The circuits are subject to change without no
3. ● : Solder links.




TO SIGNAL
TO DEF BOAR
S S2
Y GND
C TRAP
C S2
GND
L S2
R S2
GND
21PIN-Y
21PIN-R
21PIN-G
21PIN-B
NC
AV C
SDA
SCL
GND
Y-AV
V GND
V AV
C COMB
Y COMB
TV V
TV R
TV L
+9V-1
AV-L
AV-R
SYNC-AV1
A MUTE
SDA
SCL
5V
E3 DET
C S2
S S2
Y GND
L S2
R S2
+5V-3
+5V-2
+9V-2
+9V-1
+12V-2
+27V
C TRAP
C-AV
CHROMA
C.Sync
B.MASK
0.5Vp-p
0.4Vp-p
0.65Vp-p
1.0Vp-p
1.2Vp-p
1.9Vp-p
2.3VDC
0.8VDC
UP CONVERTER UNIT
100HZ E/W
TO DEF BOARD
HD 15K